DOCUMENT RESUME

ED 441 623 RC 022 045

TITLE	Grab a Great Resource: Using Educational Resources in the Community.
INSTITUTION	Northern Illinois Univ., De Kalb.
PUB DATE	1999-00-00
NOTE	101p.; Photographs may not reproduce adequately.
PUB TYPE	Guides - Non-Classroom (055) -- Reference Materials - Directories/Catalogs (132)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	*Educational Resources; Elementary Secondary Education; *Enrichment Activities; Environmental Education; *Field Trips; Museums; Outdoor Education; School Community Relationship
IDENTIFIERS	*Illinois (North)

ABSTRACT

A guide to teaching resources in three northern Illinois counties was created by 28 teachers in a graduate course entitled "Integrating Community Resources into Curriculum and Instruction." The first part of the guide provides contact information and a brief description for approximately 100 people, places, and things that could be resources to enhance instruction. These resources are located in Lee, Ogle, and Whiteside Counties, Illinois. Featured articles go into detail about particular resources and include background information, possible lesson plans, available experts, and suggestions on how to use the resources. Many suggestions involve field trips to local businesses, community service agencies, historic sites, or natural areas. Articles include: "Ashes to Ashes, Dust to Bronze" (Steve Toole); "Beautiful Bears for Beautiful People" (Chris Milnes); "Teaching in the Absence of Four Walls: The Benefits of 'Duck, Duck, Goose'" (Christine M. Spera); "National Manufacturing Company: Hardware Building Better Schools" (Jennifer Roth-Longe); "Williams Auto Body: Starting a Second Century of Service" (Rich Montgomery); "What To Do until the Ambulance Arrives" (Dawn Arickx); "In Patient Hands: An Interview with a Woodcarver" (Sue Castelein); "Floating Back in Time on the Green River" (Ted Alston); "Discover the Nature Center at Lowell Park" (Joyce Dean Stogentin); "Bomb Building Business in Amboy: The Green River Ordnance Plant" (Lynn Longan); "What You Do Know Can Health You" (Roberta Fredericks); "The Banditti" (Mary Miller); "The University of Illinois Extension: Putting Knowledge To Work" (Janet Eden); "Catch of the Day" (Karen Mayberry); "'E' Is for Engineering" (Dan Arickx); "What Is Heritage Canyon?" (Fran Smith); "Investments: Who Needs Them?" (Jeanne Fuger); "A Fun Filled Day Trip to Tampico, Illinois" (Deana A. Newman); "Illinois Department of Corrections: Dixon Correctional Center" (Trina Dillon); "Nachusa Grasslands: Franklin Creek State Natural Area" (Connie Jones); "Campground as Classroom Treasure: O'Connell's Yogi Bear's Jellystone Park" (Karen Baylor); "Like Time Was: Paul Graehling and His Museum" (Jan Bates); "Learning from the Past with Writers of the Future" (Susan Tyrrell); "Amboy Depot Museum: Serving Iron Trains to Children's Brains" (Tom Full); "Fatal Equations: A Trip to the Morgue" (Ric Cupp); "The Bread and Butter of the Rock River Valley: Northwestern Steel and Wire" (Peter Goff); "Turn Your Gym into a Skating Rink" (Jan White); and "Be a Shining Star" (Lou Ann Schuldt). (SV)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 441 623

Grab A Great Resource: Using Educational Resources in the Community

Written by Members of CIOE 534: Integrating Community Resources into Curriculum and Instruction

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Clifford E. Knapp 2

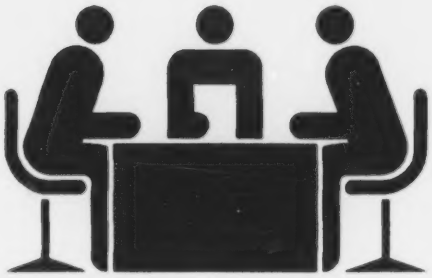
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

BEST COPY AVAILABLE

RC 022045

Grab A Great Resource: Using Educational Resources in the Community

CIOE 534
Integrating Community Resources into Curriculum and Instruction



Published by
Northern Illinois University
DeKalb, Illinois.
Spring, 1999

Contents

Introduction

From The Impossible To The I'm Possible, *Clifford E. Knapp* i

Acknowledgements ii

Preface iii

Resource Guide

Lee County 1

Ogle County 6

Whiteside County 10

Articles

Ashes To Ashes, Dust To Bronze, *Steve Toole* 19

Beautiful Bears For Beautiful People, *Chris Milnes* 21

Teaching In The Absence Of Four Walls: Understanding The Benefits Of "Duck, Duck, Goose", *Christine M. Spera* 23

National Manufacturing: Hardware Building Better Schools, *Jennifer Roth-Longe* 26

Williams Auto Body: Starting A Second Century Of Service, *Rich Montgomery* 29

What To Do Until The Ambulance Arrives, *Dawn Arickx* 31

In Patient Hands, *Sue Castelein* 33

Floating Back In Time On The Green River, *Ted Alston* 37

Discover The Nature Center At Lowell Park, *Joyce Dean Stogentin* 39

Bomb Building Business In Amboy: Green River Ordnance Plant, *Lynn Longan* 41

What You Do Know Can Health You, *Roberta Fredericks* 43

The Banditti, *Mary Miller* 45

The University Of Illinois Extension: Putting Knowledge To Work, *Janet Eden* 47

Catch Of The Day, *Karen Mayberry* 50

"E" Is For Engineering, *Dan Arickx* 53

What Is Heritage Canyon?, *Fran Smith* 55

Investments: Who Needs Them?, *Jeanne Fuger* 58

A Fun Filled Day Trip To Tampico, Illinois, *Deana Newman* 61

Illinois Department Of Corrections: Dixon Correctional Center, *Trina Dillon* 63

Nachusa Grasslands – Franklin Creek State Natural Area, *Connie Jones* 66

Campground as Classroom Treasure: O'Connell's Yogi Bear's Jellystone Park, *Karen Baylor* 71

Like Time Was: Paul Graehling And His Museum, *Jan Bates* 74

Learning From The Past With Writers Of The Future, *Susan Tyrrell* 77

Amboy Depot Museum: Serving Iron Trains To Children's Brains, *Tom Full* 80

Fatal Equations: A Trip To The Morgue, *Ric Cupp* 83

The Bread And Butter Of The Rock River Valley: Northwestern Steel And Wire, *Peter Goff* 85

Turn Your Gym Into A Skating Rink, *Jan White* 87

Be A Shining Star, *LouAnn Schuldt* 90

FROM THE IMPOSSIBLE TO THE I'M POSSIBLE

By Clifford E. Knapp

Twenty-eight teachers crowded into a Sterling High School classroom one cold January afternoon to begin their first graduate course leading to a master's degree in Curriculum and Instruction. They were a diverse group with teaching responsibilities ranging from pre-school to grade 12. There were a few first-year teachers and others who had taught for several years. Some were assigned to self-contained classrooms or had broader school-wide duties across many grades. Others were subject-matter specialists in physical education, health, biology, physical science, chemistry, Spanish, business and computers, driver's education, mathematics, language arts, social studies, and music. How could one course, "Integrating Community Resources into Curriculum & Instruction", meet everyone's educational needs and interests?

Although I had taught this course before, never did I have this many students with such a wide range of teaching assignments. I wondered how we could bridge the gaps created by our diversity. If I could have read the students' minds and tuned into their feelings that first night, I may have been less confident about reaching the course goals.

One goal was to explore cultural journalism through researching and writing. Did everyone feel equally good about their abilities to do this? I doubt it. Another goal was to investigate the educational resources in the surrounding area through direct contacts with people, places, and things and tie them to the school curriculum. Would everyone quickly grasp the concept of the community as an extension of the regular classroom? I doubt it. Another goal was to select a group writing project to demonstrate the area's learning potential. Could we easily select something that would help everyone apply this approach to their everyday teaching? I doubt it. The last goal was to survey the experiential education literature and apply it to our final product. Could everyone connect this literature directly to their teaching? I doubt it.

Despite my doubts and, I'm sure, theirs, we began to form our learning community and to solve the educational challenges before us. Through brainstorming, finding out about each other, reading, watching videos, peer editing, and discussing our goals and how to meet them, we clarified our path to our ultimate goal -- becoming better teachers. We used two instructional models to help us find the way -- Expeditionary Learning Outward Bound and Foxfire. Both of these national, educational programs involve students as major decision makers in their learning and their teachers as facilitators and coaches.

The path to our goals was not smooth, however we knew that rough times can often teach valuable life lessons. Feelings of fear, confusion, resentment, surprise, joy, and satisfaction waxed and waned during the time we spent together. Despite this roller-coaster ride of thoughts and feelings, we were determined to overcome the barriers.

This book which you are now holding is concrete proof that a diverse group of dedicated and hard-working teachers can find common ground and succeed in a task some thought impossible. What once seemed IMPOSSIBLE can now be viewed differently -- I'M POSSIBLE. We achieved success because each person in our group believed that they could make a difference by choosing to work cooperatively with others. We hope that you enjoy reading our product and that it will prove to be useful in helping the school and community join together in meaningful ways. Enjoy the journey into the community.

Clifford Knapp is a professor of Curriculum and Instruction at Northern Illinois University assigned to the Lorado Taft Field Campus in Oregon, Illinois. He teaches a variety of outdoor and community-related courses at the undergraduate and graduate levels. He enjoys reading, writing, and experiencing nature and human nature and has been described as having a love affair with words.

Credits

Production Managers
Dan Arickx
Dawn Arickx
Peter Goff
Chris Milnes
Rich Montgomery

Cover/Title/Credits
Trina Dillon
Karen Mayberry
Jan White

Proofreaders
Jeanne Fuger
Jennifer Roth-Longe
Mary Miller
Deana Newman

Contents/Preface
Ric Cupp
Janet Eden
Steve Toole
Susan Tyrrell

Typists
Karen Baylor
Roberta Fredericks
Connie Jones
Lou Ann Schuldt
Christine Spera

Editors
Ted Alston
Jan Bates
Sue Castelein
Tom Full
Lynn Longan
Fran Smith
Joyce Dean Stogentin

Acknowledgements

Mr. Gary Steiner, Superintendent of Sterling Schools is responsible for making available the master's program through NIU.

Dr. Knapp for writing the introduction and making this all possible.

Preface

What in the world is this?

This is a resource guide of people, places and things in Lee, Ogle and Whiteside counties designed to assist educators in enhancing instruction. The guide consists of a brief alphabetical listing of community resources and in-depth articles describing selected listings.

The first section of the guide consists of the names of the resources, addresses, telephone numbers and short descriptions. The descriptions may include grade appropriateness, applicable subject matter, contact person and a general explanation of the source.

Featured articles go into detail about particular resources and include background information, possible lesson plans, experts you will encounter and suggestions of how to use it.

How do I use it?

First, scan the short listings in the front of the resource guide. Look for sources that apply to the subject area or grade level you teach. If there is an asterisk by a resource that interests you, there is a corresponding feature article in the back of the guide to give you more information.

Next, if you decide one of these people, places or things might be appropriate for your class, telephone numbers are given at the end of each listing. Most questions you have that are not addressed in this guide can be answered over the phone.

We hope you find this resource guide helpful and that it will provide some new options for enhancing learning.

Then what?

Show and tell someone about this resource guide. Make copies and give them away as presents!

The Class

*Amboy Depot Museum*p.80*

East St., Amboy, IL 61310 **(815)857-2572**

Museum is open on Saturdays and Sundays May thru Oct. Call Ron Hargitt to tour at other times. Old Steam Engine on site donated by Northwestern Steel and Wire.

*Discover "E" Program*p.53*

809 East Second Street, Dixon, IL 61021 **(815)284-3385**

A program held during National Engineers Week each February. The intention of the program is to raise awareness of the need for science and mathematics education. Thomas W. Houck is the Chairman of the Rock River Chapter of the Illinois Society of Professional Engineers. They will send an engineer to your classroom to discuss what engineers do.

*Dixon Correctional Center*p.63*

2600 N. Brinton Ave., Dixon, IL 61021 **(815)288-5561**

The Dixon Correctional Center is a medium security prison offering tours for educational purposes. Those interested may contact Ms. Diane Stewart at extension 2230. Requirements include a securtiy clearance and a 30 day notice for approval.

*Duane Paulsen*p.41*

Grand Detour, IL 61021 **(815)652-4764**

Duane is a local historian and contributor to the Dixon Telegraph. Topics covered by Duane are Lincoln in Illinois, the Green River Ordinance Plant, and the history of Grand Detour.

First National Bank

220 E. Main, Amboy, IL 61310 **(815)857-3625**

Call Larry Hawes for tour details.

*Franklin Creek State Nature Area*p.66*

1872 Twist Rd., Franklin Grove, IL 61031 **(815)456-2878**

This area is located right down the road from Nachusa Grasslands and is a large animal and forest preserve. Franklin Creek has many different habitats available for your students to observe. A water mill is located on the premises that has been converted to a learning center. Field trips and guest speakers are available.

*Green River State Wildlife Area*p.37*

375 Game Rd., Harmon, IL 61042 **(815)379-2324**

Visit Northwest Illinois' best remaining prairie-wetland habitat. The site contains examples of native grasses and wildflowers that once dominated this area. Large groups are required to register in advance.

*Kim Pettygrove-Edward D. Jones*p.58*

203 1st St., Dixon, IL 61021 **(815)288-3838**

Would you like to teach your students to calculate simple interest? Mr. Pettygrove is willing to come to schools and discuss his career choice. Economics, Math, and even History classes could benefit from his presentation.

Lee County Farm Bureau

37 S. East Ave., Amboy, IL 61310 **(815)857-3531**

Offers teachers a variety of Ag Science Kits ranging in subject from insects to soil investigations. No charge to check these kits out.

Lee County Health Dept.

1315 Franklin Grove Rd., Dixon, IL 61021 **(815)284-3371**

Lee Co. offers speakers on topics in two areas. Community Health (nursing division) which includes, sex education, nutrition educ., and breast cancer awareness. Second area is Environmental Health Prgm. which touches on food services, sanitation and home owner const. Contact: Abstinence, nursing, environmental departments.

Loveland Communtiy House Museum

513 W. Second Street, Dixon, IL 61021 **(815)284-2741**

An eclectic group of interesting exhibits include items belonging to John Dixon, town founder; primitive farm tools; war items; Native American artifacts and much more. Hours are from 9:00am to 12:00pm on Wednesdays, Thursdays and Fridays and the first Saturday of each month from 9:00 am to 3:00 pm. and also by appointment.

*Lowell Park Nature Center*p.39*

2117 Lowell Park Rd., Dixon, IL 61021 **(815)288-5209**

A nature center, 7 miles of trails, picnic shelters, playgrounds, and a ball diamond are located along the Rock River. Educational classroom visits to the nature center may be scheduled year-round.

Mihm-Jones Funeral Home

303 E. Main, Amboy, IL 61310 **(815)857-2611**

Casket and embalming rooms usage is explained to students. Call Pat Jones for details.

*Nachusa Grasslands*p.66*

Lowden Rd., Franklin Grove, IL 61031 **(815)456-2340**

Nachusa Grasslands is a wonderful nature preserve where you can look at the various habitats, animals and birds that are in a prairie setting. There are volunteers and programs available for field trips and speakers, along with continuing classroom activities.

O'Connell's Yogi Bear Jellystone Park Camp Resorts

970 Greenwing Rd., Amboy, IL 61310 **(815)857-3860**

O'Connell's campground offers numerous environmental resources for students of all ages. Refer to article in this publication for further information.

Old Settlers Memorial Log Cabin and Lincoln Statue

Lincoln Statue Dr., Dixon, IL 61021 **(815)284-1134**

This is a reconstructed, completely furnished, pioneer log cabin near the Lincoln Statue. A statue of 23 year old Abraham Lincoln, who served in the Blackhawk War of 1832.

Plum Hollow

1933 Rt. 26, Dixon, IL 61021 **(815)288-7102**

Plum Hollow offers bowling, rock climbing, laser tag, slot car racing and bumper cars. Please try to call 10 or more days in advance. Contact Teresa Blackburn.

Rare & Ornamental Bird Farm

1785 Lee Center Rd., Amboy, IL 61310 **(815)857-3607**

This unique farm has rare and ornamental pheasants, wild and ornamental ducks and geese, silke chickens and tame Whitetail deer. Elementary children would enjoy a visit to this farm Any size group is welcome but approx. 20 at a time are taken on the one hour tour. No fee. Spring season only. Contact: Mr. & Mrs. Eugene W. Leffelman

Raynor Garage Doors

1101 E. River Rd., Dixon, IL 61021 **(815)288-1431**

Tours for all levels of students. Learn about a local business with nation wide distribution. Speakers available for in classroom discussions. Contact John Young at extension 2578.

*Sally Baumgardner, Rolling Thunder Prairie*p.66*

8986 S. Lowden Rd., Franklin Grove, IL 61031 **(815)456-2083**

Sally is a very exciting ecosystem interpreter who can give a wonderful presentation to your class on the prairie biomes. She and her husband work with the Nature Conservancy on Nachusa Grasslands and Franklin Creek State Nature Area. Mrs. Baumgardner is wonderful with all age groups.

Stephanie Roe-Quentin

709 Countryclub Dr., Dixon, IL 61021 **(815)453-7411**

Seven Reasons Why You Fail- this is a motivational presentation for high school students. Her topic covers ways to improve people skills, how to find a job, and ways to accept failure and make failing successful. Mrs. Roe-Quentin can be reached also at home at 815-284-8553.

Sylvia Heinze

KSB Hospital, Dixon, IL 61021 **(815)285-5939**

Ms. Heinze is the Cancer Care Coordinator of KSB. Educational information can be provided about prevention skin and lung cancer and anti-smoking campaigns. Information can also include early detection o cancer.

Telegraph-Newspaper

113 S. Peoria Avenue, Dixon, IL 61021 **(815)284-2222**

The Telegraph offers tours that can be arranged by contacting Jim Nelson at the above phone number. It shows the students the importance of quality writing skills, technology, and other academic skills.

Thornwwod Minature Horses

1949 IL. Rt. 38, Ashton, IL 61006 **(815)453-7482**

This farm raises purebred minature horses. The children would have the opportunity to learn about the horses, from care and grooming to the history of their origination. Contact: Rosemary Somers.

BEST COPY AVAILABLE

Universal Flavors

25 East Main, Amboy, IL 61310 **(815)857-3691**

Ice cream toppings are made here. Call Terry Lynch for details about tours.

University of Illinois Extension Lee County

280 N. Wasson Road, Amboy, IL 61310 **(815)857-3525**

The Illinois Cooperative Extension Service provides practical, researched-based information and programs to help individuals, families, farms, businesses, and communities in Illinois. For 4-H information ask for the 4-H contact person. e-mail: lee_co@mail.aces.uiuc.edu

Wayne & Ester Silvius

Ashton, IL 61006 **(815)453-2118**

Mr. & Mrs. Silvius are participants of a volunteer organization referred to as the NOMADS. Their slide presentation encourages students to voluntarily take part in local and/or state programs that would benefit those who are in need of assistance. (Appropriate for Jr. High and High School)

AmCore Bank

2 W. Main St., Mt. Morris, IL 61054 **(815)734-4166**

The bank offers tours for classes. They allow the students to see all areas of the bank including the ATM and vault. This tour is most appropriate for grades 1-3.

*Art Casting*p.19*

5 Madison St., Oregon, IL 61061 **(815)732-7777**

Art Casting is a foundry that casts bronze statues. Any age group is welcome at the foundry, but fourth grad and older would best understand the procedures shown. Call for guided tours.

Blackhawk Waterways

201 N. Franklin Ave., Polo, IL 61064 **1-800-678-2108**

Welcome to the fun-filled Blackhawk waterways of Northwestern Illinois. Join in the merriment of the colorful fairs and festivals. There is always something to celebrate here!

Dale Blough

1806 N. Evergreen, Polo, IL 61064 **(815)946-2880**

Mr. Blough has collected Native American artifacts from his farm in the Polo area. He brings them to the classroom and discusses their significance with the students. Appropriate for grades four through high schoo

Department of Natural Resources

Oregon, IL 61061 **(815)732-3288**

The DNR has speakers available for your classroom specializing in ecostystem environmental issues and our forests. These speakers are made available to go to the state natural areas with you in this county.

George Kapotas Sculptures

5389 Kilbuck Road, Monroe Center, IL 61052 **(815)393-3331**

George Kapotas does stone, marble and wood sculptures. He started 12 years ago as a hobby and it turned into a business, although most pieces are for himself. He enjoys sculpting abstracts, people and animals. Contact person: George and Jeanne Kapotas.

14 BEST COPY AVAILABLE

Illinois Farm Bureau

646 Allison Circle, Byron, IL 61010 **(815)234-7712**

Dozens of brochures, pamphlets, books and videos are available. Money is available for classroom use. This is a wonderful resource and the people have a great enthuasiasm. Contact Ferol Empen, Fe4440@AOL.com

John Deere Historical Site

8393 S. Main Street in Grand Detour, Dixon, IL 61021 (mailing address) **(815)652-4551**

Highlights include John Deere's pioneer home, the archaeological site where the steel plow was developed, a blacksmith shop, natural prairie and visitors' center. The site is open daily from 9:00 A.M. to 5:00 P.M., April through November, winter group tours can be arranged. Admission is $3.00 for those twelve and older. School groups are admitted free of charge.

John Desjarlais

934 Crest Court, Byron, IL 61010-8943 **(815)234-4833**

Mr. Desjarlais is published novelist and writer of short fiction and essays. A teacher of writing at Kishwaukee College, he has led fiction writing workshops and given presentations throughout Illinois and Wisconsin. desjarlais@mwci.net

M & M

Highway 64, Mt. Morris, IL 60154 **(815)734-6868**

Students tour a grocery store. The tour can be tailored to class needs. The store includes meat department, bakery, and deli. Owners: Phil and Michelle Messer

Mt. Morris Public Library

101 E. Front St., Mt. Morris, IL 61054 **(815)734-4927**

The library offers tours. Some ideas would include how to use the library, how a library is set up, or how it is used for research.

*Ogle County Coroner*p.83*

214 S. First St., Oregon, IL 61061 **(815)732-3201 ext 240**

The county coroner will present a program about car crashes and their causes. Either at the county coroner's or in your school. He includes the states attorney and the mother of a girl killed as a passenger in a car accident. Contact person: Darrell G. Cash

Ogle County Newspapers

121-A S. 4th St., Oregon, IL 61061 **(815)732-6166**

Students learn about what it takes to produce a newspaper. The tour could take place at the plant. Reporters could be classroom speakers.

*Paul Graehling*p. 74*

107 South Division, Polo, IL 61064 **(815)946-2716**

The Graehling Museum is a large, private collection of antiques and tools. Many grade levels and subject areas can benefit from a visit to this amazing site.

*Pinecrest Manor*p. 77*

408 S. McKendrie Ave., Mt. Morris, IL 61054 **(815)734-4103**

Pinecrest Manor is the nursing home in Pinecrest Community. Classes can work with residents within the community. The possibilities are endless. Contact Bev Linzemann, the activities director, to arrange activities.

Polo Historical Society

123 Franklin, Polo, IL 61064 **(815)946-4142**

Mrs. Obendorf is an expert on Polo history in particular and Ogle County in general. The Polo Historical Society has expanded greatly in the last ten years and has created a well-organized museum. The Aplington House, once visited by Abraham Lincoln, was the home of the founder of the city of Polo. Contact Betty Obendorf (home) 815-946-3544

Pride of Oregon/Paddle Wheel Boat

Route 2 North of Oregon, Oregon, IL 60161 **1-800-468-4222**

The pride of Oregon offers a 2-hour cruise on the scenic Rock River. You can enjoy a relaxing lunch or moonlight dinner while on the authenic paddle boat.

Stronghold Castle

2 1/2 miles north of Oregon, Route 2, Oregon, IL 61061 **(815)732-6111**

Stronghold is open for year round tours. Facilities are also available to rent. They have a variety of summer camp session options for children.

BEST COPY AVAILABLE

University of Illinois Extension Ogle County Unit

421 W. Pines Road, Suite 10, Oregon, IL 61061 **(815)732-2191**

To receive information about the educational programs and resources in the areas of agriculture, youth, family, and community development. Available to Ogle County teachers, call the office for a description of "4-H School Enrichment Programs" and resources, ask for the 4-H person. Fax: (815)732-4007. E-Mail: ogle co @ mail.aces.uiuc.edu

American Red Cross Lincolnland Chapter

112 W. 2nd RockFalls, IL 61071 **(815)625-0382**

Offers a variey of presentations for your classroom. Topics are in the area of safety, health and first aid.

Annelise Shaw

412 First Avenue, Sterling, IL 61081 **(815)625-0333**

She is the Big Brother/ Big Sisters Program Coorinator. The YMCA also offers programs concerning sexual assault and domestic violence. Both of these can provide educational materials for schools.

*Beautiful Bears for Beautiful People *p.21*

322 Washington Street, Prophetstown, IL 61277 **(815)537-2172**

Jerry Ballard is a business owner in Prophetstown. He uses recycled fur to make stuffed teddy bears. Contact: Jerry Ballard.

Behrens Country Village

Prophetstown Rd., Rock Falls, IL 61071 **(815)625-5116**

This business is located on a family farm and has unique collections. You'll find flowers, plants, antiques, quilting classes, Christmas crib and more. It makes a great seasonal class trip.

*Bill Wescott *p.31*

NA **(815)626-6649**

Bill Wescott is a paramedic who began the program "What to do until the ambulance arrives?". He speaks to students at all levels about a variety of topics. The phone number is a non-emergency number at ambulance service. Leave a message.

Bud Williams

1701 W. Rte. 30, Rock Falls, IL 61071 **(815)625-2763**

This gentleman would be an excellent speaker for American History classes on the Depression, WWII and Local history events.

Carlton House Museum

Main Street, Morrison, IL 61270 **(815)772-4183**

The museum holds several rooms of historic items, including a dental office dating back to 1939. Special themes are also included at various times of year. Hours are 1-4 Fri.-Sun. Special tours might be arranged by calling Louise Wiersema at (815)772-4183.

Centennial Park

E. 11th St. & Ave. D, Rock Falls, IL 61071 **(815)625-2763**

Centennial Park has sports fields, playgrounds and a fitness trail. There are two lakes and it is located next to the canal. There is an 1800's vintage schoolhouse.

CGH Medical Center

100 E. LeFevre Road, Sterling, IL 61081 **(815)625-0400**

Offers a variey of presentations for your classroom. Topics are in the area of Health/Nutrition.

Christmas Tree Farm

Sherwood Forest 3783 Smit Rd. Prophetstown, IL 612 **(815)537-2597**

Students learn how Christmas trees are planted and cared for from seedlings through harvest. There are animals for children to learn about. i.e. llamas, miniature deer, peacock & goats. Contact persons Lyn and Carol Proeger.

City of Rock Falls Water Department

603 West 10th St., Rock Falls, IL 61071 **(815)622-1106**

The water department offers tours to fourth through sixth graders at the facility located at the end of 8th Ave. behind Dillon School. Contact Person: Public Works Secretary

Dairy Queen

1109 Rt. 30, Rock Falls, IL 61071 **(815)625-2833**

Open daily 11 a.m.-9a.m. will deliver ice cream orders to area schools. Offer tours which include ice cream production and sanitary requirements. Contact Person: Mark or Annette Jomant.

David Hoffman/Rock River Provision

3309 W. Rte. 30, Rock Falls, IL 61071 **(815)626-1195**

Rock River Provision is a wholesale food distributer. Mr. Hoffman would be a good guest speaker for a Foods, Business or Advertising class.

Dillon Home Museum

1005 E. 3rd St., Sterling, IL 61081 **815-622-6202**

Field trips are offered on Tuesdays and Thursdays from 10-12 and 1-4. There are three main attractions, the 1929 Baldwin Steam Locomotive, the home of the Sterling Rock Falls Historical Society Carriage House built in 1859, and the actual home with furnishings and artifacts of the Dillon family.

Eagle County Market

2301 Locust, Sterling, IL 61081 **(815)625-6405**

Lend your chemistry students on a scavenger hunt to find ionic compounds on food labels.

Emerald Hill Golf Course

16802 Prairieville Rd. Sterling, IL 61081 **(815)622-6204**

Contact Phil Hall, Groundskeeper at the golf course. Have your students look into horticulture and landscaping.

*Evergreen Lawn Farm *p.61*

1201 Matznick Rd., Tampico, IL 61283 **(815)4386451**

Oscar Koenig's registered Holstein farm is located outside of Tampico. Learn the process of registering cows and learn about the milking process.

*Heritage Canyon*p.55*

515 N. Fourth Street, Fulton, IL 61252 **(815) 589-2838**

They offer self-guided tours. The hours are 8:00 A.M. to 5:00 P.M. from April-December 15, weather permitting.

BEST COPY AVAILABLE

*Illinois Department of Natural Resources *p.50*

Sterling, IL 61081 **(815)625-2968**

This department offers a fishing clinic that is flexible for ages 5 and up. Experiences include fish facts, handling fish, casting practice and fishing at real water sources.

Illinois Forge Inc.

2900 Rte. 30, Rock Falls, IL 61071 **(815)625-0815**

The leader in custom forgings in the country. They supply forging for John Deere, Holland Hitch and Dana Corporation.

Jack Spencer

313 1st Ave., Rock Falls, IL 61071 **(815)625-5100**

This is a State Farm Insurance agent who will discuss forms of insurance and different options for financial planning. Business, Consumer Ed. and Adult Living classes would benefit from his experience.

Josie Johnson

203 East Third St, Prophetstown, IL 61277 **(815)537-5260**

Josie has many talents. She is willing to share. She is a Folk Art painter, and she paints houses and landscapes. She also has an antique button collection. She will give talks or programs on the history and art of buttons.

*Kenneth Pifke *p.33*

316 Tree Lane, Prophetstown, IL 61277 **(815)537-5654**

Ken Pifke has been carving wood since 1990. He is a member of the Rock River Wood Carvers Club. Ken prefers to speak to small groups of students.

Lutheran Social Services

Sterling, IL 61081 **(815)626-7333**

They offer a variety of presentations for your classroom having to do with health, nutrition, social skills, relationships, sexuality and substance abuse.

*Marjorie Kontos*p.90*

Sterling, IL 61081 **(815)625-3680**

Mrs. Kontos is a storyteller and is involved in creative dramatics. Her stories range from children to adult and would make a wonderful visitor to the classroom.

Mark Merritt

300 1st Ave., Rock Falls, IL 61071 **(815)626-5847**

This an attorney that specializes in litigation (divorce, car accidents , and wills). Mr. Merritt would be a great speaker for Business Law/Government and Consumer Ed. classes.

Michael Hunter

2310 Bishop Rd., Prophetstown, IL 61277 **(815)537-5684**

Mike is a federally licensed falconer who will bring his red-tailed hawk to shools. He can gear his presentation on falconry and birds of prey to any age group. There is a fee for his presentation.

*National Manufacturing Co. *p.23 and p.26*

#1 First Ave., Sterling, IL 61081 **(815)6251320**

National is a resource that covers the academic areas of Math, Science, and Social Studies. Contact Mary Durahm in the Human Resource Dept. for information on guest speakers.

*Northwestern Steel and Wire*p.85*

Wallace Street, Sterling ,IL 61081 **(815625-2500**

NWSW provides teachers with three great teaching tools across the curriculum: history of the mill, the business aspect of an industry and the vocational opportunities at the mill.

Odell Agricultural Heritage Museum

202 East Lincolnway, Morrison, IL 61270 **(815)772-8889**

Museum has a lot of antique farm exhibits. Hours are 1-4, Fri., Sat. and Sun. Special tours may be arranged by Calling Jack Ottosen at (815)772-3013.

Robert Stone

309 Market Street, Prophetstown, IL 61277 **(815)537-5609**

Robert is an Eagle Scout in his local troop. He is an expert on camping, canoeing, and he has traveled many places. Robert is willing to talk about his experiences and demonstrate the equipment used for camping.

Rock River Antique Center

2105 E. Rte 30, Rock Falls, IL 61071 **(815)625-2556**

If you enjoy flea markets, stop in here. Open April trough September, they are held the last weekend of every month. There's something for everyone and students of history are welcome.

Rock River Valley Skydivers

10930 Hoover Rd., Rock Falls, IL 61071 **(815)625-6188**

Will demonstrate gear to students and if the weather cooperates, will fly in to the school. Very informative. Contact Person: Paul Biggerstaff (815)288-3497 Home.

Rocket Lanes

405 W. Rte. 30, Rock Falls, IL 61071 **(815)625-3615**

This establishment will allow schools to reserve up to 24 lanes. Excellent resource as a reward or physical activity involving math skills. Closed from May 1st through the summer.

*Ronald Reagan's Birthplace *p.61*

111 South Main Street, Tampico, IL 61283 **(815)438-2130**

A guided tour through our 40th President's birthplace. On display are photos, letters, books, and other memorabilia. Call Amy Mc Elhiney for an appoinment. Donations appreciated.

Sauk Valley Fabrication

1104 Emmons Ave., Rock Falls, IL 61071 **(815)626-0985**

This is a custom fabrication shop. The latest techniques in drafting and welding can be seen. Drafting, Welding, Physics and Math classes would find a visit here interesting.

Selmi's

1206 Dixon Ave., Rock Falls, IL 61071 **(815)626-3830**

Spring tours are by appoinment only and are offered in April. Video tour of greenhouse shows students how to plant and equipment needed for planting. NEW in the fall of 1999 an Educational Center. You will also find animals, pumpkins, gourds, and hayrack rides.

*Skatetime School Programs*p.87*

P.O. Box 265, Morrison, IL 61270 **1-800-55-SKATE**

Skatetime is a business that delivers roller or land inline skates directly to your gym. Available in all counties. Fax:815-772-7178, Website: www.Skatetime.com.

Sterling Park District

211 E. St. Marys Rd. Sterling, IL 61081 **(815)622-6200**

Offers many recreational activities, such as pool rental(indoor/outdoor), batting cages, driving range, frisbee golf, volleyball courts, walking course, cross-country skiing, and guided tours.

Sterling Sewage Treatment Plant

2400 West Lynn Blvd., Sterling, IL 61081 **(815)626-8378**

Learn about the chemistry involved in treating water before release into the Rock River. An appreciation for clean water is gained. Contact Scott Howard.

Tampico Farmer's Elevator Co.

Luther Road, Tampico, IL 61283 **(815)438-6155**

Located outside of Tampico. Learn about how grain is stored, and about the grain markets. Contact Mike Glassburn for a guided tour.

*Tampico Historical Museum *p.61*

Main Street, Tampico, IL 61283 **(815)438-2130**

Retrace the history of Tampico. Photos, books, and artifacts are displayed. Call Amy Mc Elhiney for an appointment. Donations are appreciated.

University of Illinois Extension Whiteside County

100 E. Knox Street, Morrison, IL 61270 **(815)772-4075**

Provides educational services in Agriculture, Home Economics, 4H, Youth and Community development to the people of Whiteside County. To recieve an enrichment packet of resources and programs available to teachers, call the office and ask for the 4H contact person.e-mail: whiteside co@mail.aces.uiuc.edu

Wahl Clipper Corp.

2902 Locust, Sterling, IL 61081 **(815)625-6525**

A nationally known producer of hair cutting products. They provide guided tours to describe the production line process and necessary skills to obtain employment .Field trips can be scheduled through Bill Dempsy at the above location.

Wayne R. Wachholz

630 East Third Street, Prophetstown, IL 61277 **(815)537-2574**

Wayne R. Wachholz has been a birdwatcher for over 30 years. He also has some knowledge of wildflowers. Mr. Wachholz has slides, eggs, and nests to share.

Whiteside County Extension Unit

100 East Knox, Morrison, IL 61270 **(815)772-4075**

Offers a variety of presentations for your classroom. Topics are in the area of Health/Nutrition, and social skills and relationships.

*Whiteside County Health Dept.*p.43*

18925 Lincoln Road Morrison, IL 61270 **(815)772-7411**

Offers a variey of presentations for your classroom. Topics are in the areas of health, nutrition, substance use/abuse and sexuality.

Whiteside County Jail

200 East Knox, Morrison, IL 61270 **(815)772-4044**

They offer demonstrations on how to use dogs to assist in their searches. They also demonstrate how they dust for fingerprints.

*Whiteside County Soil and Conservation District*p.44*

16255 Liberty Street, Morrison, IL 61270 **(815)772-2124**

The Bandits" are available for field trips and educational programs. Karen Berridge (772-2124) makes the entire essence of the group come alive by listening to hear an informative presentation.

*Williams Auto Body*p.29*

1701 W. Rte. 30, Rock Falls, IL 61071 **(815)625-2763**

This is a repair shop. Vocational classes would benefit from a visit here.

YMCA of the Sauk Valley

412 First Avenue, Sterling, IL 61081 **(815)625-033**

Offers a variety of presentations for your classroom. Topics are in the areas of: Social Skills/Relationships and Safety.

ASHES TO ASHES, DUST TO BRONZE

BY

STEVE TOOLE

Like the mythological Egyptian Phoenix, Art Casting foundry literally rises out of the ashes of the charred foundation of its former building. After a massive fire in 1996 that destroyed the entire foundry, a modern, more efficient facility was built to replace the previous building. Approaching the site, one notices the contrast between the remaining scorched ruins and the new structure that sits beside the picturesque Rock River.

The challenge of rebuilding Art Casting was large, but nothing new to Dr. Harry Spell who owns and operates the foundry with his wife Karla. The Spells challenged themselves in 1990, when they left their long time positions at Bradley University in Peoria to purchase and run Art Casting in Oregon Illinois. The opportunity to actively participate and contribute to "the arts" by producing fine art statuary was something these two educators could not resist. Their determination and hard work in this endeavor has seen Art Casting become one of the top producers of fine quality bronze sculpture in the United States.

A music professor, conductor, entrepreneur and a student of the arts, Dr. Spell has succeeded in making his foundry one of the most sought after and respected in the nation. Art Casting focuses on producing fine art and sculptures submitted from artists throughout the United States and Canada. The bronzes made at Art Casting range from high school art class sculptures to commercial and commissioned pieces done by internationally known sculptors.

Sculptures produced at Art Casting are found across the United States, South America and Europe. Four statues from this facility are in the Smithsonian Institution in Washington D.C. Many war memorials throughout America have been created at Spell's foundry. Other bronzes include a larger than life size statue of Mother Teresa made for a convent and a likeness of Joe Dimaggio cast for the Italian-American Sports Hall of Fame in Chicago. Probably the most famous of the bronze sculptures produced at this facility is the sculpture of Michael Jordan that stands majestically outside of the main entrance to The United Center in Chicago.

Michael Jordan statue "The Spirit". Photo by K. Tanaka

A relatively small facility, Art Casting employs five full time workers and artisans. This bronze casting foundry uses the "lost wax" casting method in the production of their pieces. The technique has been used throughout the centuries by cultures such as the Vikings and ancient Greeks. This method of producing bronzes has been improved in recent years because of modern technology and new chemical compounds, but the basic method remains the same.

THE LOST WAX CASTING METHOD

1. A mold is made from an original sculpture (clay, ceramic, wood, or other "sculptable" material). The detail of the original work must be captured in this mold.

2. Molten wax is poured into the mold to form a wax model that is a duplicate of the original piece.

3. The wax is taken from the mold and chased (re-detailed) by a skilled artisan.

4. The wax casting is then dipped several times into a liquid ceramic sand that accumulates into a sturdy ceramic mold.

5. The ceramic shell is placed in a special kiln and fired. The shell bakes and the wax is melted (lost) from the shell. This firing creates a hollow shell mold.

6. The ceramic shell (mold) is removed from the kiln and molten bronze is poured into the shell.

7. After the casting has cooled for several hours, the shell is carefully broken away leaving the unfinished bronze.

8. Fragments of the shell are sandblasted away and the piece is inspected.

9. If necessary, the work is then assembled.

10. All welds are chased, imperfections corrected, and more sandblasting is done to ensure an even finish.

11. Finally, chemicals are applied to give the sculpture the desired patina (color and tint).

Dr. Spell, who guides visitors through the facility, shares his enthusiasm and expertise with them. His knowledge of art, music, and history gives valuable insight into the procedures that individuals observe on a tour. While touring the foundry, visitors can see sculptures in various stages of production, from clay originals to wax models to the nearly finished works. Not only does Dr. Spell guide groups through his foundry, but he also holds seminars for colleges and universities, including The Art Institute of Chicago.

Many of the steps in the process of making a bronze statue take place in the largest room of the foundry. Making molds, pouring wax, pouring bronze, sandblasting, and welding are all done in this room. A separate area is reserved for artisans to chase (re-detail) wax models. A climate controlled room where temperature and humidity need to remain constant is used for applying coats of ceramic to the wax models. There is a second floor gallery where bronze work, original paintings, drawings, and printscan be obseved.

Harry and Carly Spell love the arts. They also like sharing what they know with others. Dr. Spell welcomes the public to peruse his gallery and visit the foundry. He also holds informal community seminars on art and music history.

Teachers planning field trips to Art Casting need to call two to three weeks ahead of their approximate trip date to make arrangements for the best day and time. Any age group is welcome at Art Casting, but fourth grade students and older would best understand the procedures shown. Up to twenty students is the recommended number for a tour group. A tour lasts for about thirty to forty minutes.

Steve Toole lives in Ashton, Illinois where he teaches social studies and art history at the high school. He also coaches the academic bowl team and is the advisor to the drug and alcohol awareness group.

28

Beautiful Bears for Beautiful People

By Chris Milnes

DISCOVERING THE BEAR FACTS

In the middle of Prophetstown, a small farm town in Illinois, a toy maker works in a tiny shop. Master furrier designer, Jerry Ballard, spends his days making teddy bears and bunnies out of 100% recycled fur. After 17 years in the fur industry, Jerry turned his hobby into a business, and now owns and operates "Ballard Bears, Beautiful Bears for Beautiful People."

Jerry Ballard was born and raised in the Whiteside County area and graduated from Chadwick High School. After high school he moved around the country working a variety of jobs. About twenty years later, Jerry found himself out of work and living in Denver, Colorado. While looking for work there, he answered a want-ad in the paper for a furrier apprenticeship. He was offered that job and worked as an apprentice for four years. During this time he learned how to make and design fur coats. Throughout the years, he enjoyed this line of work and decided to stay in the fur design business.

During his spare time he honed his skills by learning to make teddy bears out of animal fur. While Jerry has worked with many different kinds of skins, he found that the best fur to work with is sable, a soft dark fur. Rabbit fur is the worst to use because it sheds. He has also made coats out of unusual furs such as leopard, kangaroo, and buffalo, but the most commonly used furs are sable and mink. Jerry has made coats that range from a few hundred dollars to several thousand dollars.

After working for other fur designers, Jerry decided to move back home where he would reunite with his family and turn his hobby into a business. His shop window is

Who invented the teddy bear?

Most believe the teddy bear was invented in 1902 and is named after Theodore "Teddy Roosevelt, America's 26th president. President Roosevelt was visiting Mississippi, and decided to go hunting. After having an unsuccessful day, one of his aides discovered a lost bear cub and tied it to a tree. Roosevelt could not bring himself to shoot the defenseless cub. A cartoon of a bear from the Washington Post soon became a symbol for his presidency. A little jointed toy bear called Teddy's Bear was soon made in his honor. The bear was an overnight success and became an international hit.

Cockhill, Paulina The Ultimate Teddy Bear.

full of bears that would bring a smile to the face of any child or adult walking past. Stepping into the shop you can view fur coats adorning the room. A large bookshelf holds many costumes that are used for the specialty bears. An oversized table used for measuring and cutting sits in the middle of the room. Behind the table is a desk with one sewing machine; that's where the magic happens. This machine sews the fur together by using a sideways stitch. Jerry is the only one who operates the fur machine because it requires great skill.

Jerry working hard at the one sewing machine.

From start to finish, it takes Jerry and his employees two to four hours to make one bear. The fur that he uses is purchased from a supplier or brought in by a customer. Jerry's major furriers are located in Chicago, St. Louis, Orlando, and Milwaukee. Once the fur is selected, the first step is to remove the lining from the coat. Four to five bears can be made out of an average size coat. Next, one of Jerry's employees traces a pattern onto the coat's inside. Each body part from the pattern is marked similar to a dress pattern. The pieces are then cut and sewn together inside out so that the stitches are out of sight. The nose, eyes, and face are the most difficult to sew because the fur has to lay just right. Once everything is together, the bear takes shape. As the figure is turned fur side out, a furry bear appears! The final step is to fill the bear with polyfilm, and sew the hole in the back closed.

The bears come in a variety of standard sizes ranging from key ring size, to three feet tall. Jerry also makes specialty bears wearing costumes, such as a wedding bear, a golf bear, or a train engineer bear. Each bear has a tag attached with a number and is signed by the designer, Jerry Ballard.

Ballard Bears has been in business for three years, and the business has seen growth each year. Jerry Ballard's bears can be found all over the United States in many fur saloons or finer department stores such as Bloomingdales. This specialty shop in Prophetstown has reached across the country and soon will be worldwide with its own web page.

In summary, Jerry Ballard teaches an important lesson through his business. Learn a craft well, work hard, and success will come. Even though Prophetstown is a small farm town, it has a lot to offer the community and schools. Ballard Bears is a great example of a community resource. Jerry Ballard has worked hard in his life learning a trade and creating a business. Jerry's advice to the students who have their own hobbies, "Be prepared to work many hours and pound the pavement."

How can a specialty shop be used in the classroom and fit the state standards?

Recently a third grade class took advantage of a great community resource, Ballard Bears. A variety of lessons covers many areas of the curriculum. In social studies the students researched the history of the teddy bear and wrote expository reports. *State Goal 5; Use the language arts to acquire, assess, and communicate information.* They brought in their own teddy bears, which inspired them to measure, sort, and graph. They also worked on a school-wide survey of the students' favorite kind of teddy bear. *State Goal 10; Collect, organize, and analyze data using statistical methods.* During art class a few of the students designed a bear mascot to fit their school name. The unit's culminating lesson was taking a tour of Ballard Bears. *State Goal 26; Through creating and performing, understand how works of art produced.* A toy maker may not be in every town , but there is some resource that can be used in any classroom.

***Chris Milnes** is a third grade teacher at Prophetstown Elementary School. She received her BA at Illinois State University.*

Teaching in the Absence of Four Walls: The Benefits of "Duck, Duck Goose"

By:
Christine M. Spera

I recently found a cartoon that hit home. It was a picture of a teacher of very young children, telling the class that they were going to play a game called "Duck-Duck-Goose." Many of us are probably familiar with this game, but just in case you are not, the children sit in a big circle on the floor while one person, called Person *A*, walks around the outside of the circle gently tapping heads and saying, "Duck, Duck, Duck...." Finally Person *A* chooses a "sitting duck," whom I will call Person *B*. When Person *A* taps the head of Person *B*, he or she says "Goose" instead of "Duck." As Person *A* says "Goose" he/she takes off running around the outside of the circle as fast as he/she can while Person *B* quickly gets up and tries to catch Person *A*. If Person A can make it all of the way around the circle and sit down in Person *B*'s spot before getting caught by, then Person *B* becomes Person *A* and the process begins all over again. It really is a simple, fun-filled childhood game that most of us have played at some point in time. I'd be willing to bet that most of us never gave a thought as to why we were playing it.

In the cartoon that caught my attention, a student stated that they'd be happy to play Duck-Duck-Goose, "If you can show me how it would benefit me in later life." The teacher and other classmates are shown with dumb-founded looks on their faces as if to say, "I have no clue!"

If we could try to picture ourselves in school many years ago, many of us would probably imagine of sitting at a desk all day, piled with writing tools and books and moving from one book to another. School may start by first doing an assignment out of a math book, then maybe a science book, then perhaps geography and so on, until recess or lunch or the end of the day interrupted the events. Oh how so many students looked forward to those times of day when the school bell rang, releasing them for some kind of break. Even though it was not fifty years ago for me, it was not that long ago that I was looking forward to those breaks in the school day myself. Many students then graduated with a knowledge of how to solve problems out of a book, but they were not able to take that knowledge and apply it to practical

"I'd be happy to play duck-duck-goose if you can show me how it would benefit me in later life."

BEST COPY AVAILABLE

problem solving, which really is what the modern workforce is all about. Today, many educators are trying to enhance the school day by using supplements to traditional learning. I think that this is a very good trend and I am not the only one who believes this. There have been many studies showing that connections to the world outside of the four walls can greatly magnify a classroom learning experience.

We can read about all of this research, but intuitively, many educators can think of various reasons why learning should be taken beyond the classroom. I think that the first step in convincing ourselves of this is to ask, "Why are we in education?" The answer to this question is personal and will vary greatly from one person to the next. Being in education, however, all of us have a common goal and duty to carry on and improve our culture. The next question then that we might ask ourselves is, "What is culture?" According to The American Heritage Dictionary, one definition of culture is, "(3) The arts, beliefs, customs, institutions, and all other products of human work and thought created by a people or group at a particular time." Being an educator, I believe that it is my duty to carry on our culture. Knowing the definition of culture, the question then is, "How can we possibly improve this culture solely within the confinements of four walls?"

Another question that we as educators should ask ourselves is, "What do we hope to accomplish in teaching?" Again this is a personal question and the answers will vary. However, I would hope that one of our common goals is to help children grow into adulthood and become responsible, contributing members of society. After all, doesn't this ensure the security of our future?

Finally, another question that all us should keep in mind while facilitating learning is, "What message do we wish students to get from this experience?" What I would like for students to realize is that learning is a lifelong experience that doesn't stop with a diploma.

By taking learning outside the classroom, (or by bringing the outside in), we can sustain our culture successfully while helping young people become responsible citizens. Today's workplace requires teachers who can integrate skills across the curriculum. By being exposed to and working with members of a community students can learn many facets of a culture, and also develop practical problem solving skills. They can learn that education is the "stuff of life" and that life and education are inseparable.

Throughout human history, we have established communities and relied on each other for learning. Every community contains skilled and talented people who enjoy teaching others. The rich human resources in communities can provide students with a balance between theory learned from a book and the practice of experience. This connection is very important. Any person, place or thing in the surrounding area is a potential learning experience. Not everyone learns in the same way and not everyone will learn the same thing from the same experience. It has, however, been shown that a well-planned experience combined with serious preparation, reflection, and evaluation with other learners can provide some of the best educational experiences. There is no substitute for experience because there's no such thing as "simulated living."

In Marge Sherer's conversation with Mary Pipher (a clinical psychologist and best-selling author), Pipher recalls that there was a time when the word *community* suggested oppression, but now the meaning is different. "Community is an abstract idea like the wilderness. It has become more desirable as it becomes more extinct." A school classroom is a small community. Good communication between the classroom community and the "outside" community can provide many benefits. Students can examine potential employment opportunities – careers they may or may not want to pursue. For example, I once took a group of students to a local manufacturing company to tour their chemistry laboratory. I wanted to show the students that people really do use chemistry on a daily basis. One student came back and said that she definitely did not want to work in a factory-type job. By getting from one place to another in the plant, students observed much more than just the chemistry procedures. I'd be willing to predict that many of our students are uninformed about what people do all day at work. Also, by joining the community with the world of "acadamia", the curriculum can be understood in terms of "real-life" applications in the workplace. Students can possibly collaborate with professionals, gain independence in their own learning and see connections between theory and practice. The ideal situation would be to actually work with a particular business over time to solve a particular problem. There are many opportunities to do these kinds of projects.

Some state and federal agencies would readily welcome the help from a group of youngsters to help lighten their workloads. This is not done just so students can study trees, flowers or rivers, but rather so that they will re-create their own ideas as to what schooling is and how it is related to their lives. In addition, many people are concerned that we are losing a sense of connection among individuals. Taking our classrooms out into the community can provide emotional bonds that tie people to places. Without personal community experience, connections amongst ourselves and a sense of place are limited. Some students may feel like strangers in his or her own town.

Remember that students are not the only individuals that benefit from learning outside the classroom. Many talented people around us are more than willing to be a part of our education. I had asked an algebra class to go into the community and interview people about how they used mathematics on a daily basis. Most students chose to interview their parents, which resulted in a wonderful connection. Shortly after that project ended, I received a phone call from a student's father, thanking me for assigning the project. He said that his son was never really interested in what he did all day long, and that by doing the interview, he felt this brought a new understanding of each other. Asking others in the community to participate could make them feel proud of what they are doing and give them a sense of worth. It can also help bridge communication between generations. Unfortunately, many of today's youth are viewed as problems that need to be dealt with. By developing positive communications between schools and workplace, people can begin to view youth as a resource to develop.

Opening new horizons for today's youth is an integral part of our jobs as educators. By teaching outside of the classroom, we are being consistent with what we value. Let us show students how playing duck-duck-goose, will benefit them later in life. Let us show them how important it is to have balance and harmony between themselves and the rest of the world. Let us show them that they are an important part of the community.

Traditional school settings of a classroom often prevent effective communications between the community and today's students, and therefore, closing off the connections between education and "real life." We must overcome these restrictions on education by moving outside. While we may not easily explain the connection between duck-duck-goose and life in general, can offer teachers and their future citizens limitless opportunities by showing them where to open doors to free themselves of the confining four walls.

References

Angeletti, Sara R., Group Writing and Publishing: Building Community in a Second-Grade Classroom. N.d.

Christ, George M.,Curriculums with Real-World Connections, Educational Leadership, (Mar 1998)

Conrad, Dan and Hedin, Diane, School-Based Community Service: What We Know from research and Theory. Phi Delta Kappa, June 1991

Duffy, Gerald G., (June 1998). Teaching and the Balancing of Round Stones. Phi Delta Kappa, n.d.

Greenberg, Ellie, The community as A Learning Resource, The Journal of Experiential Education, Vol. 1, No. 2 (Fall, 1978)

Hatch, Thomas, How Community Contributes to Achievement, Educational Leadership/ May 1998, Vol. 55, No. 8.

McFaden, Dennis and Nelson, Barbara, (May 1995). A Refuge for Real-World Learning. n.d.

Nessel, Linda J., Experiential Education as a Catalyst for Social Change: Is it time to challenge the metaphor?, Journal of Experiential Education, Vol. 17, No 2, Aug 1994.

Olson, Lynn, The New Basics in School-to-Work, Educational Leadership, (Mar 1998)

Scherer, Marge, The Shelter of Each Other, Educational Leadership/ May 1998, Vol. 55, N0. 8.

Westheimer, Joel and Kahne, Joseph, Building School Communities: An Experience-Based Model, Phi Delta Kappa, Dec 1993.

Christine M. Spera teaches math and science at Sterling High School, Sterling, IL. She received a bachelor's degree in mathematics education from Northern Illinois University.

National Manufacturing Company
Hardware Building Better Schools
By:
Jennifer Roth-Longe

National
Hardware Makers Since 1901

Inside this Article

About National Manufacturing Co.

Meeting the Illinois State Education Goals

History of National Manufacturing Co.

National Manufacturing Co. got its start in 1901 as the Sterling Wagon Company. Initially, the company produced wagons and tools used on farms. Because of the founders' background experience in hardware, the company changed its focus to hardware.

In 1902, National patented the "Big Four" barn door hanger, named after the four founders; L.A. Bittorf, H.V. Bittorf, W.P. Benson and Ben Washburn, all above six feet tall (Sullivan, 3-10-99). The company's catalogue grew to include corner irons, drawer pulls, hinges, hangers and rails. "As National continued to expand its line over the years, it also laid the foundation for its responsible commitment to community and nation." This commitment reached its pinnacle during World War II, when National manufactured hinges and hasps for military ammunition boxes. (Oltmans, 1994).

National's product line growth was matched by the company's physical growth. Property along Wallace Street in Sterling was bought to allow for the company's expansion. Production sites were built in Sterling's twin city, Rock Falls to help the company meet its production demands.

National's growth and success has been credited to their firm belief in quality products and exceptional service to its customers. The company now produces nearly 4,500 products, and it employs around 700 employees at its Sterling and Rock Falls factories.

Although National plays an important role in the Sterling and Rock Falls communities, the scope of the company is international. National of Canada, a sister company located in Saskatchewan, extends National's retail services and hardware and fastener production across the Canadian border. The growing network of representatives is introducing the National line of hardware to the world market.(http://www.natman.com/outsidetheusframe.html, 1998).

Starting out as a small 50 by 70 building for building wagons, National Manufacturing has grown to be one of the nation's leading producer in home, farm and builders' hardware. National's commitment to inventiveness and dedication is promising to take National into a successful new millennium.

A historic collage of National taken from Nationals web page.

34

National as a Resource for Area Schools

National plays an important educational role in the local community. A large percentage of parents work for National and share their job experience with their children. As Joseph L. Bittorf, Vice President of Engineering explains, National is a company "committed to maintaining a working dialogue between itself and area schools." One example of this is National's partnership with Whiteside County Vocational Center's job shadowing program. Eligible high school students apply for work site experience where they are mentored by a National employee in different areas of the company. This is one way the company insures mentored students are knowledgeable in a specific area of National, preparing them for possible future employment with the company (Joseph L.. Bittorf, 1999).

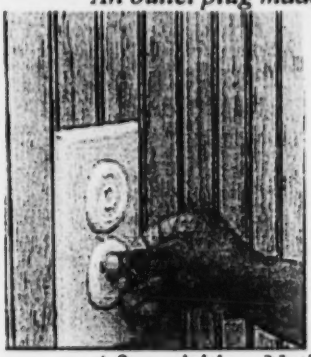
For students in lower grades, National still has plenty of resources to offer. By visiting National's Web page, students are able to take a closer look at the production and distribution of National's products. The page titled "Start to Finish Accountability" shows several photographs of the production process. A brief explanation is also given of the steps necessary for employees to start with raw material and form it into a finished product ready for distribution (http://www.natman.com/starttofinishframe.html).

The distribution of National's products is based on the ordering process called "Vendor Managed Inventory". Orders are placed through high speed "salesforce" computers that are networked into National's distribution site computers. Orders are quickly turned around and shipped to vendors in three days (http://www.natman.com/distributionframe.html).

With over 4,500 National products, students may be interested in finding lists of available hardware. There is an "Product Finder" page that offers a look at the many different categories of hardware including; Connection, Construct-It, Gates, Hanger and Rails, Hinges, Home, Organizing, Repairs, Security, Solid Brass, and Storm and Screen Doors. Students will be surprised at how common these items are around their own home (http://www.natman.com/profinder01.html).

A new product line that is very important to children is National's Child Safety Products. Students can learn about the products available to keep them safe like outlet covers, range knob covers, cabinet locks and window cord wind-ups. Classes could discuss how the products work and why they are needed in homes with children.

An outlet plug made by National.



After visiting National's Web sites, teachers may be interested in inviting a guest speaker from National to present a topic to a class. Possible subjects for presentations include science, mathematics, business and engineering (Bittorf, 1999). Examples of how National Manufacturing Co. is a resource to educators meeting the Illinois State Education Goals are included on the following page.

Jennifer Roth-Longe is a teacher at Dillon school in Rock Falls, Illinois.

National Manufacturing Co. Meets Education Goals

by

Jennifer Roth-Lange

Meeting the goals of the Illinois State Education Standards can be accomplished by tapping into community resources. National Manufacturing Co. is a Sterling-Rock Falls resource that can meet the goals of English and Language Arts, Mathematics, Science and Social Studies. Guest speakers can visit classrooms to explain the design and making of home, farm, and building hardware. Sample products can be shown to help the students better understand how National's products improve our day-to-day living. By using a local resource, students will gain a better appreciation of their community.

English and Language Arts

The **4th Illinois State Goal** says students are to "listen effectively in formal and informal situations". Inviting a guest speaker into a classroom to present information is one way a teacher meets this goal.

"Apply acquired information, concepts, and ideas to communicate in a variety of formats" is the **5th Illinois State Goal**. After a presentation, students must be able to apply the information learned in a chosen format to meet this goal.

Mathematics

The 10th Illinois State Goal is for a student to "formulate questions, design data collecting methods, gather and analyze data and communicate findings". To meet this goal, students could investigate a chosen National product and demonstrate the percentage of sales that product was responsible for netting.

Science

The 11th Illinois State Goal is to "know and apply the concepts, principles and process of technological design". Students will meet this goal when they demonstrate what they have learned about the technological design process National uses in their production of hardware.

"Know and apply concepts that describe properties of matter and energy and the interactions between them" is the **12th Illinois State Goal**. Students can learn about the production of National's hardware. The process includes stamping, die casting the product before it is plated, painted or galvanized. This method demonstrates how matter is changed, meeting the requirements of this goal.

The **13th Illinois State Goal** says students must "know and apply concepts that describe the interactions between science, technology and society". Students meet this goal by learning how National Manufacturing is a company that uses technology to operate its high-speed distributions.

Social Science

"Understand how different economic systems operate in the exchange, production, distribution and consumption of goods and services" is the **15th Illinois State Goal**. By using National Manufacturing Co., students learn about the economic system of supply and demand.

Sources

- Bittorf, Joseph L. Interview, March, 1999.
- Durham, Mary. Interview, April, 1999
- National Manufacturing Co. [Online] Available: http://www.natman.com/singlesourceframe.html 1998.
- Oltmans, Dwight. National Manufacturing: Background/History 1994.
- Sullivan, Louise. Interview, March, 1999.

Williams Auto Body: "Starting A Second Century Of Service"

By: Rich Montgomery

When people leave Rock Falls and travel west, they go by one of the oldest family-owned businesses in the area; Williams Auto Body. A sign, in front of the shop reads "Founded in 1897." Not everyone is a history major, but even grade-school students ask, "Why 1897? -We did not have cars in 1897!" This historical fact is true. There were no cars in 1897, but Williams Auto Body has been servicing modes of transportation for more than 100 years.

Williams Auto Body began business in 1897 with its founder, Albert Williams. The first business, a buggy repair shop, was located at 203 19th Avenue, Sterling. Albert was assisted by his sons, Homer and Ralph. When Albert went to California in 1929, Homer continued at the Sterling location and worked out of a barn at 308 13th Avenue. In 1936 he formed a partnership with Vernon (Bud) Williams. The business, then known as Homer D. Williams and Son, moved to 1207 E. Fourth Street. In 1940, the business relocated to 104 E. Second Street, Rock Falls. With auto parts almost impossible to find, because of the war, Bud stored the tools and equipment and joined the Air Force, serving until November 1945. When the war was over Bud, went to work for the Eberhart Body Shop. He started building his own business site, a building that present owner Gil Williams helped carry blocks for, at 1701 W. Rt. 30. Gil and his son, Scott, still repair cars at the same location.

The services at Williams Auto Body have gone through many changes. Wooden spoke wheels gave way to Firestone rubber buggy tires. In the late 20's the shop began working on cars. The tough times of the 30's forced the shop to work on just about anything that needed to be repaired. If you talk to Gil, or Bud, they tell stories about the bootlegger's cars that were repaired, refrigerators that were painted, and broken tractors and combines that found their way to the shop.

When the cost of services of Williams Auto Body are examined, you will also see dramatic changes in the prices. In the 1920's and 30's labor shop rates were $.50 an hour. One could look at a ledger from 1941 and see that the most expensive jobs ran about $45-$60. A receipt from 1942 listed the following items and costs:

	Then	Now
1 used wheel	$2.50	$25.00
1 rear view mirror	1.00	20.00
1 left door handle/screws	1.30	30.00
1 used running board	4.25	75.00
Labor to straighten left rear fender, quarter panel, door panel, top and one wheel.	33.50	1500.00+
Painting	12.50	800.00
Towing	2.00	35.00
	52.50	2485.00

Shop hourly rates in the 50-60's went up to 4.50 per hour. In the 70-80's these rates were at $16-18, and now the shop rate is at $38 per hour.

Prices were not the only things that have changed. Paint jobs that were done with a brush are now done with air power sprayers. Each step of the paint process has a specialized sprayer. The pot-bellied stove, used to dry the paint, has been replaced with a paint booth and infrared

drying. That $12.50 paint job in 1942 can now, with the new "chameleon color"at $800 a quart, cost $20,000 for a custom paint job. The hammer, crowbars, plumb-bob and level have been replaced by the Kansas Jack frame rack machine and laser measuring devices. Even the ways measurements are taken have changed. Millimeters and meters have replaced inches and feet. Repairing steel has given way to replacing with plastic. A trip to the body shop in the 40's would have found the men spraying paint, without shirts, to keep the lint from their cotton shirts from falling onto the surface. Cars were chained or grounded to avoid static electricity build-up. That pot-bellied stove, with its radiant heat, meant that only half the car could be kept warm enough to paint. Now specialized sprayers, coveralls, facemasks with respirators, and computerized equipment are the norm. The experienced appraiser, with a trained eye, has been replaced with the digital camera and computerized estimates.

In addition to body repair, Williams Auto Body also offers 24-hour towing service. Gil's wife, Caroline can tell stories about driving people to Chicago or to a motel or getting them a rental vehicle. Gil has a favorite story dealing with a breakdown around the Christmas holidays. The owner of the car did not have enough money to stay in a motel. Gil had him come back to his house. "We meet some of the nicest people. That's the best part of the business"

Williams Auto Body has been successful for more than a century. One might ask, "How can a business be so successful for so many years?" The secret of success has been the ability to change with the times. A solid reputation and quality work have created a customer base that passes from generation to generation. The Williams' success started with Albert then was passed to Homer, then to Bud, then to Gil and in the future to Scott. Several years ago, *Popular Mechanics* recognized Williams Auto Body as being one of the oldest repair facilities in the country. The only other family-run repair shop, older than Williams Auto Body, was a blacksmith shop.

History teachers, looking for a local source of time period pictures, will find plenty of examples at Williams Auto Body. The staff has done a great job of maintaining records and pictures. The collection of ledgers and receipts could be used for historical price comparisons. Accounting classes could use these items for changes in accounting practices. Bud Williams would be an outstanding guest lecturer for his stories of life during the depression, the War years and local history. Vocational classes could tour the site and see the modern technology used in the auto repair business.

Williams Auto Body has stood the test of time. Four, soon to be five, generations have managed the business as the business has changed from buggies to autos. Prices have changed, equipment has changed, and technology has changed. Williams Auto Body started with the pot-bellied stove, a crowbar and a hammer. What will the second century bring to Williams Auto Body?

About the Author: Rich Montgomery is a social studies teacher at Rock Falls High School. Rich teaches American History, Area Studies and World Geography.

Bill Wescott: A Veteran Paramedic

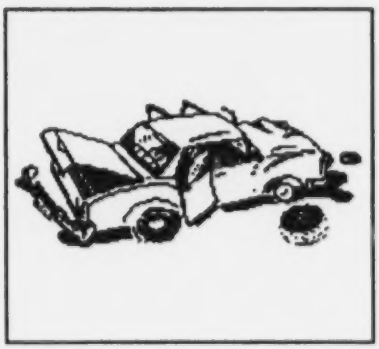
by Dawn Arickx

"Help, there has been a terrible car crash!" "My daughter just fell down the stairs and isn't breathing!" "I am having chest pains. I think it may be a heart attack!"

These are all situations that no one wants to be in but at some point may face. We have all heard the familiar saying- "It's an emergency! Call 911!" This is a life line in our communities that many people take for granted. If you ever need to dial 911, who are the people coming to your rescue? What kind of training do they have?

I was fortunate to interview Bill Wescott who has been a paramedic in the Rock Falls/ Sterling area for 26 years. He was able to answer these types of questions and many more which I hope you will find helpful in teaching your curriculum.

Requirements of a paramedic. To be a paramedic a person must be at least 18 years of age and have a high school diploma. There are three different levels of emergency medical technicians. The first is Emergency Medical Technician Basic. To enter this level a person must have 140 hours of training plus 40 clinical hours. The second level is EMTI (intermediate) which requires basic certification plus 450 hours of training and 120 clinical hours. The highest level is EMTP (paramedic). This level requires EMTI certification plus 600-800 hours of training and 150 clinical hours. In addition, an EMTP must complete an extra 300 hours every two years. Once paramedics establish themselves in a community, it is very difficult to relocate. Because a majority of these hours will not transfer, they would have to start over on the salary scale.



Paramedics must be prepared for all types of situations. Responding to car accidents is just one of them.

Schedule of a Rock Falls/ Sterling paramedic. The paramedics in the Rock Falls/ Sterling area follow a rotating schedule of 24 hours on and 48 hours off. However, the paramedic is on-call for the first 24 hours that he has off. This averages out to a 56 hour work week. A typical three-day schedule would be the following:

DAY 1- Work 8 A.M. to 8 A.M.
DAY 2- On call 8 A.M. to 8 A.M.
DAY 3- Duty free 8 A.M. to 8 A.M.
**Begin the cycle again.

While on duty, the paramedics stay at the emergency headquarters. Since they are the first ones called, they must be ready at a moment's notice; however, if there are no calls, they are allowed to sleep after 10 P.M. An on-call paramedic is called if both teams of on-duty paramedics in Rock Falls and Sterling are busy.

Bill's personal feelings about his career. Bill says the most rewarding part of his job is being able to help people who are in a stressful situation. When paramedics answer a call, often times it is more than just the victim who needs help.

For example, they must be able to calm parents who feel guilty about their child's injuries or reassure a young child who does not understand what is happening to a loved one. For this reason, an Emergency Medial Technician must be a real "people person". Bill expressed that the most frustrating times are when they are not able to make a difference even with their extensive training. When this happens, a paramedic must be able to cope with the situation. In fact, there have been occcasions when people are well into their training before they realize that the emotional side of their work is too overwhelming. Luckily for the public, however, many of them are able to overcome this obstacle.

History of an educational program. About 20 years ago Bill and a fellow worker, Keith Diehl (who has since passed away), decided to begin an educational program that would make people aware that what they do before the ambulance arrives is important and often times critical to the outcome. So in November 1979, they initiated a multi-level program called "What to do until the ambulance arrives".

"What to do until the ambulance arrives." The usual program lasts two to four hours but can be varied greatly. In fact it is basically "custom fit" to the needs of the audience. There are many ways to use this program in the classroom at any level.

EXAMPLES:

1st grade: Tour an ambulance.

6th grade: After a lesson on choking, have a paramedic demonstrate the Heimlich maneuver.

10th grade: When discussing teen drinking and driving, have a paramedic speak about the cases he has seen first hand.

Many educators are concerned that the Illinois State Goals and Standards are addressed in all lessons. Depending on the topics discussed, paramedics who speak in your classroom can help you meet at least some of these goals in language arts, science, and health. In addition to meeting state goals, important real life lessons can be taught using this program.

ILLINOIS STATE GOALS ADDRESSED:

Lang. Arts Goal 4: Listen and speak effectively in a variety of situations.

Science Goal 13: Understand the relationships among science, technology, and society in historical and contemporary contexts.

Health Goal 22: Understand principles of health promotion and the prevention and treatment of illness and injury.

Health Goal 23: Understand human body systems and factors that influence growth and development.

Health Goal 24: Promote and enhance health well-being through the use of effective communication and decision-making skills.

The time frames of the program can be manipulated as needed—an hour a day for a week, two hours in one block, or just a 30-minute session. During the program, the paramedics stress three things that *all* people should know. These include how to swim, basic first aid, and CPR. The program is free of charge, and a two-week notice is preferred so presenters can work out their schedules and make preparations for the class. Perhaps one of the biggest advantages of the program is that there are no geographical boundaries. They will go wherever needed to share the information. Of course, Bill did stress that not all paramedics are certified paramedics. Some are at basic or intermediate levels so educators need to be aware of what training the EMTs in their specific communities have.

"What to do until the ambulance arrives" is a valuable tool to show children how vital they can be in an emergency situation.

"What to do until the ambulance arrives" is a flexible program offered at all levels. It not only meets many Illinois State Goals, but it is also a valuable tool to show children how vital they can be in an emergency situation. So what are you waiting for? Please give Bill a call before you or one of your students have to use 911 in a real emergency situation!

***Dawn Arickx** is a 6th grade math teacher at Rock Falls Middle School in Rock Falls, IL. She is also team leader and student council advisor. She previously taught middle school math in Houston, TX.*

In Patient Hands

AN INTERVIEW WITH A WOODCARVER

By Sue Castelein

It is possible to connect the curriculum with the world outside of school. Interviewing the adults in the school's community about their occupations and hobbies is a good place to start.

When Ken Pifke got his first glimpse of a woodcarvers show in 1989, he knew right away woodcarving would become his hobby. "I thought, this is it. I know what I want to do when I retire from my work as a tool and die maker," Ken recalls. "My job involved close tolerance work, and woodcarving requires similar precision and patience." Ken's desire to try his hand at this very old art was suddenly born.

That enthusiasm for carving was still strong in Ken when he retired one year later. He met a carver who gave him a wooden block, a duck pattern, and an invitation to join the local carving club. It was all the encouragement Ken needed. He admits he soon purchased his first carving tools, returned to his basement workshop, and "three hours later, the duck was done."

Becoming a member of the Rock River Wood Carvers Club brings Ken many advantages. Although he describes himself as a self-taught carver, Ken credits his fellow members for teaching him techniques that have helped expand his carving. According to Ken, not every woodcarver uses the same technique; each has his or her own way of shaping wood. "I am able to learn a lot by seeing the work of others. We share what we know about carving and talk about the problems we run into," adds Ken.

For Pifke, woodcarving is just a hobby that brings him satisfaction and pleasure. He does not sell his work, preferring to give his carvings away as gifts. He does not advertise, but occasionally receives requests for pieces. Ken wants to keep things that way. "Like I say," Ken repeats, "it's just a hobby. I don't like to worry about making things perfect. My carvings are for me. That's why I don't like to work for anyone. Deadlines cause mistakes; I don't like that kind of pressure."

A carved wooden sign, "The Pifke's", hangs from the lamp post in the front yard of Ken and Marilyn's home bordering Coon Creek and gives visitors their first look at Ken's talent. Inside the ranch-style home, carvings of bears, otters, golfers, birds, Native Americans, weathered old sailors, and numerous other pieces adorn shelves, tables, the fireplace mantel, and the entertainment center. A carving of Saint Francis of Assisi stands on the hallway table. "I also carved the crucifix that hangs above the double doors at St. Catherine's Catholic Church," Ken says.

Each carving in the Pifke home "tells" a story of how, why, and when it was made. "Every time I carve," Ken explains, "I look at a subject in a different way and with a different interpretation; each carving is unique." Ken adds he relates best to animal carvings. These private works, displayed so proudly, offer a sampling of Ken's world. They reveal what he enjoys, sees, and thinks.

A corner of the home's basement contains Ken's tidy woodcarving shop. Not surprisingly, the basement smells of wood and is dark except for the work area illuminated by the lights over it. The orderliness of the workshop is pleasing. A red cement floor and mint green walls provide a backdrop for the workbenches and dust collector Ken made, and his tools are stored in racks or lie neatly on the benches. Each knife has a cloth sheath over the blade. "Woodcarving need not require many tools," Ken says, "but I have several." Ken continues, "Sometimes I spend all day carving, but if something is not shaping well, I leave it and go outside to work in the garden or do other work until I feel everything will click again."

Ken prefers to work on two pieces simultaneously because the variety helps if he reaches a stalemate on a carving. Currently, he is working on a carving of Tiger Woods which stands 14 1/2 inches tall. The carving shows Tiger leaning on his golf club with one foot casually crossed in front of the other. He could be watching an opponent or thinking about his next shot. His second piece, as Ken puts it, is just "a little something to keep me busy when I'm frustrated." He further explains, "An old carver told me working on more than one piece at a time will help clear my mind."

Basswood is Ken's first choice for a carving wood. This light colored and relatively soft wood has a close grain and holds detail and fine points nicely. It is an excellent wood for applying the carving techniques Ken uses and is readily available from woodcarving supply houses. Pifke explains he does flat line carving for signs and plaques, relief carving in which just the surface is carved, and carving-in-the-round in which the subject is carved on all sides and stands alone.

"A woodcarver is one who can take a scrap of wood, breathe life into it with patient, skilled hands, and make it a warm object of lasting beauty. That is creativity."- William Johnston

The Beginner's Handbook of Woodcarving (Prentice - Hall)

For Ken, a carving begins with an idea and a pattern. If he is working on a carving-in-the-round, pictures from books or wildlife magazines help him sketch the front and side views of the subject onto the wooden block. A rear and top view may also be needed in order to determine the details of the piece. Sometimes, Ken uses a figurine as a study cast or model, and pattern books are available for carvers who feel they lack the artistic ability to draw patterns. "You need a good imagination to be a woodcarver," says Ken. "A good mental picture of the subject is necessary because you need to know what the next shape of your figure will be. The more background you have on the subject the better," he adds.

After Ken draws a pattern on the wood, he uses a band saw to remove as much wood as possible. He works at the saw until the silhouette of the subject can be seen on the four sides of the wooden block. Then, Ken uses his carver's knives to whittle to the

pattern's lines. The short, rigid, fixed blades and comfortable handles of carver's knives give Ken proper control for whittling. "These are the best for carving," Ken advises. "Pocket knives have folding blades that can close on the carver's hand." Each steel knife is a different size and shape in order to fit the needs of the piece being created, and each is kept razor-sharp, highly polished, and scratch free. Ken keeps sharpening stones nearby, and he uses leather for honing the knives' edges. "When beginning a project, the number one rule of carving is 'respect the knife.' I know people who have had many stitches because they did not know how to properly use a knife," Ken says.

After shaping a piece with knives, Ken switches to gouges which must also be kept sharp. The gouges look like narrow scoops and vary in size and shape. As he demonstrates, these gouges are helpful because they conceal less of the wood behind them and get well into corners inaccessible to straight-sided tools. According to Ken, gouges are necessary for finishing the surface of the piece and in shaping intricate patterns.

His orderly workshop also has a carver's knee attached to a second, smaller workbench. The carver's knee is two pieces of wood hinged together in the shape of a bent knee and is a great help to a carver. Pieces can be fastened to the knee with a carver's screw that fits through the knee and up into the carving. After Ken mounts a carving onto the knee, both his hands are free to work with knives and gouges as he swivels the piece in many positions and gets at any point of the piece.

If Ken is working on an animal carving such as a bear, he uses power tools to get the look of fur. "I use a palm grinder to get the look I want. This tool is much faster than whittling with a knife, and it makes a wonderful fur appearance," explains Ken. By pressing gently, never in a straight line, the lines of fur appear on the wood. The palm grinder is just one of Ken's power hand tools hanging from hooks above his work area.

The Rock River Wood Carvers Club meets once a month and offers beginners classes in woodcarving through the Sterling Park District. Ken helps teach the six-week carving class. "What we try to do is help each other improve as woodcarvers, help others get started, and share our work with the public," Pifke explains. Teaching, sharing, and promoting appear to be the club's goals, and from Ken's description, members also enjoy good fellowship.

His reputation as a community-minded person, willing to share his time and talent, is spreading. Ken brings his carvings to schools, and he speaks to local organizations about woodcarving. Still, this talented man remains modest about all he does. " I am not a master carver. Woodcarving is my hobby. I keep it simple. If I think I may be able to make a carving, I will. I like doing it," Ken says. Woodcarving is alive and well in the patient hands of Ken Pifke.

Connecting the Curriculum with the Expertise

There are many ways to use the information gained from an interview. Teachers may have a specific content area and activity in mind, or students may get involved in a range of activities. Interviewed people may suggest ways their expertise can be incorporated in school lessons. The following suggestions for early elementary activities demonstrate how Ken's expertise

can help teachers address state goals and standards in four learning areas.

Language Arts

* Comprehend a broad range of reading materials. (1C)
  Fill a box with books about hobbies for the children to read and enjoy.
* Compose well-organized and coherent writing for specific purposes and audiences. (3B)
  Write a letter to invite Mr. Pifke to be a guest speaker. Include the students' questions for him. Write a description of the class. Write thank you letters.
* Listen effectively in formal and informal situations. (4A)
  Listen politely to Mr. Pifke. Ask questions at the appropriate times.
* Speak effectively using language appropriate to the situation and audience. (4B)
  Share students' hobbies and interests.
* Apply acquired information, concepts, and ideas to communicate in a variety of formats. (5C)
  Write about Mr. Pifke's visit in a journal.

Math

* Measure and compare quantities using appropriate units, instruments, and methods. (7A)
  Measure the carvings in non-standard units, inches, and centimeters.
* Identify, describe, classify, and compare relationships using points, lines, planes, and solids. (9B)
  Look for lines of symmetry in the carvings. Construct symmetrical figures with various materials.

Science

* Know and apply concepts that describe properties of matter and energy and the interactions between them. (12C)
  Observe and record the properties of a carving. The students can complete an observation form which includes a space for the children's names, the date, the object they are observing, an illustration, and a list of the properties (e.g., size, shape, color, texture, weight). The students can write a sentence to tell one thing they notice about the carving.
* Know and apply the concepts, principles, and processes of scientific inquiry. (11A)
  Discuss the findings of the students' observations. Save the observation forms to make science journals.

Fine Arts

* Understand processes, traditional tools, and modern technologies used in the arts. (26A)
  Identify Mr. Pifke's tools. Understand how to use them in a safe and responsible way.
* Apply skills and knowledge necessary to create and perform in one or more of the arts. (26B)
  Try carving blocks of clay or soap. Use wooden blocks and paint to make prints. Create sculptures using wood scraps and white glue.

Sue Castelein lives in Prophetstown, Illinois. She is a kindergarten teacher at Prophetstown Elementary (301 West Third Street, Prophetstown, Illinois 61277).

Floating Back in Time on the Green River

By: Ted Alston

Thousands of years ago, glaciers made their way to the northern edge of what is today Illinois. As they began to recede and melt, they left behind a complex mosaic of habitats. Grasslands, savannas, and wetlands were part of an area that would become known as the Rock River watershed.

This area remained virtually undisturbed for centuries. Native plants and animals thrived in the biodiverse environment. Even as the European fur traders of the sixteenth and seventeenth century began to trap in the area, the habitat remained. It was not until the growth of the United States, which made it possible for numerous people to move to the area, did we begin to lose the native Illinois habitat.

These habitats would offer a wonderful outdoor experience for any student today. Yet, it is impossible to take students back in time to illustrate to them what things were like hundreds of years ago. There are no time machines which enable us to return to a time before urbanization and agriculture virtually destroyed this once great ecosystem.

For the most part, this is true. Not much seems to remain from our state's natural past. But located between the concrete roads, power lines, and farms is a place that can bring the past back to life: The Green River State Wildlife Area. Located thirteen miles south of Dixon in Northern Illinois, The Green River State Wildlife Area (GRSWA) is the most well preserved example of what was once a half million acre habitat. The area is a 2,300 acre prairie-wetland waiting to be explored.

Natural communities abound in the area. Ponds, marshes, sedge meadows, sand prairies, and savannas can be visited in a state which most resembles past centuries. Hundreds of native plant species, such as orchids, trillium, and broom rope thrive in the area. Animal species such as the short-eared owl, sand hill crane, and mud turtle also make their homes within the area's boundaries.

Careful management has helped to preserve these plants and animals for our enjoyment and the enjoyment of future generations. The Green River State Wildlife Area offers the best example of what Illinois once was, and with proper planning, could someday be again.

HISTORY

The recorded history of the GRSWA goes back to 1938. In that year, the area was purchased with funds made available through the Wildlife Restoration Program. Originally, the site was formed to help preserve the greater prairie chicken, a bird native to Illinois that had been hunted to near extinction. After it became evident that the bird was unable to thrive in the area, it was decided that the land still held a great deal of value as a conservation area. Since that time, area use has expanded to various programs dealing with hunting, camping, horse back riding, and field trials for dogs. But above all else, the area is dedicated to the restoration and protection of the native Illinois habitat.

The area was once a part of the Great Winnebago Swamp, which covered an enormous area in Northern Illinois. Composed of swampy slough and wetlands that held an elaborate ecosystem, the swamp and its life prospered. In the past 200 years, however, drainage of the swamp for agriculture has been so thorough, that only small pockets of the swamp remain. In fact, Illinois has lost over 90% of its original wetlands and over 99% of its prairies. The Green River State Wildlife Area is one of our best remnants of a unique natural environment.

CLASSROOM POSSIBILITIES

The GRSWA is an outstanding resource for teachers in the surrounding communities. It represents an outdoor, hands-on laboratory that would be impossible to duplicate within the confines of a school. Whether your purpose for visiting the area is to supplement a plant unit or to help teach Illinois history, the GRSWA can serve as an excellent resource.

An obvious reason for a field trip to the area would be to work with plant life. Plant identification activities and the creation of plant guides are easily performed. Other topics such as seed dispersal, plant adaptations, and the effects of exotic plants on an ecosystem are also possibilities. Plant parts could also be studied and compared using the enormous numbers of plants at the area.

Numerous soil types comprise the grounds at the site. Studies of soil types and plants that grow in them can be performed, as well as any investigations dealing with soil nutrients or water capacity. A guide may be obtained at the area to help you locate soil types.

The topics of wildlife restoration and conservation are popular, as is the study of the techniques used to keep the area healthy and free of exotic plant intruders. Employees at the area would be more than happy to discuss these topics with students and answer any questions they may have.

Illinois History classes would benefit greatly with a visit to the site. A trip to GRSWA would allow students to look into the past and see what the Illinois environment used to be. Students could also be exposed to the types of places that became hideouts for the famous Illinois outlaws known as the Banditti. These thieves used the swamps and prairie grasses as hiding places after committing crimes.

Of course, area use is not limited to these activities. The esthetic value of the area's wildflowers would complement any Art curriculum. Teachers have also done creative writing, geology, and math activities with students. Like the grasses, wildflowers, and swamps that once covered Illinois, the educational possibilities are endless.

Beissel, Thomas J., & Heim, James R. 1993. Green River State Wildlife Area Resource Management Plan.

Jones, Michael D. 1996. Flora of the Green River Conservation Area. Natural Land Institute.

Krohe, James. 1998. The Lower Rock River Basin. Illinois Department of Natural Resources.

Web sites to visit for activities and events:

Department of Natural Resources - http://dnr.state.il.us
Biological Conservation Science - http://nhq.nrcs.gov/BCS/soil/survey.htm/
Environmental Education - http://nceet.snre.umich.edu/
Illinois Natural History Survey - http://www.inhs.uiuc.edu/
Illinois State Geological Survey - http://www.isgs.uiuc.edu/isgshome.html
Natural Resources Conservation Service - http://www.ncg.nrcs.usda.gov/
Fun Sites - http://www.ag.uiuc.edu/~wardt/fun.htm

Available Resource Texts:

1. Illinois Wetlands: An Interdisciplinary Study. Published by the Board of Educations Scientific Literacy Program, 1998. To order send a request along with name, address, a $16.00 check made out to the Illinois State Museum, Education section - Wetlands Publication, Spring and Edwards Street. Springfield, IL 62706 - 5000.
2. Aquatic Illinois - Conservation Education Today and Tomorrow. Illinois Department of Natural Resources. Contact the Department of Natural Resources for information.
3. Project Wild. Conservation and environmental education program for educators. To order contact Project Wild, P.O. Box 18060, Boulder, CO 80308-8060. Or call 303-444-2390.
4. Project Learning Tree. An environmental Education activity guide. To order contact the American Forest Foundation, 1111 19th St. NW, Washington D.C, 20036.

Ted Alston is a fifth grade teacher in Amboy, Illinois. He lives with his wife Jill and son Zachary in Sterling. He enjoys coaching, reading, playing sports, and spending time with his family.

Discover The Nature Center At Lowell Park

By: Joyce Dean Stogentin

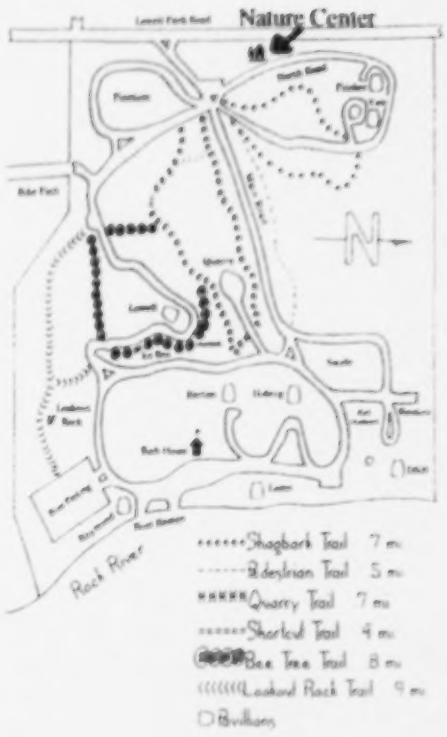
Smell the flower-scented spring breeze. Feel the warmth of the sun. Listen to the multicolored fall leaves crunch underfoot. Experience the stillness of the first snowfall that blankets the area. Delight your senses by encountering nature at Lowell Park and its nature center.

Charles Russell Lowell, Jr. bought the land that comprises Lowell Park in 1859. The property was purchased in two parcels for a total of $1375. In 1863, he married Josephine Shaw. Lowell was killed at the Battle of Cedar Creek in Virginia in 1864. Six weeks after Lowell's death, their daughter, Carlotta was born. In 1906, Carlotta Lowell offered the property to the Dixon City Council.

A majority of the council members opposed the gift of the park. They considered the property to be a big pile of brush that would be a worry to the city. Others felt that it was so far out of town that only the rich could get there with their horses and carriages. However, in 1907, the city council accepted the land after an ordinance was passed to establish Lowell Park. This park is an asset to the Dixon area. With 240 acres, it is the largest city park in Illinois.

Nestled among the giant trees just inside the main entrance is the Lowell Park Nature Center. It was established through the efforts of the Dixon Kiwanis Clubs in 1978 and enlarged in 1991. Exhibits, craft classes, nature and outdoor education programs are offered at the center. Phil Johnson serves as the Program Director and is the contact person for all nature center activities. In addition, dedicated volunteers often staff the nature center.

Classroom visits may be scheduled year round.



Lowell Park and Nature Center
Dixon, Illinois

The staff requests a month's notice to adequately prepare for the visit. Between twenty and twenty-five students can be accommodated at one time. If needed, late afternoon or evening time slots can arranged. The center is open daily during the summer. Visiting hours for the general public are from 1 to 4 p.m. on Friday, Saturday and Sunday.

Programs are available on a variety of topics. These include wildflower exploration, the river, wetlands, forests, trees, shrubs and prairies.

BEST COPY AVAILABLE

Wildlife topics include squirrels, birds, bats, owls and snakes. Information is available on the habitats of various animals. Lee County as it existed 200 years ago can be explored with the students. This would include information on the prairie grasses present at that time. Animals including buffalo, elk, deer, mountain lions and wolves could be found. The Inlet and Winnebago Swamps covered nearly three-fourths of Lee County.

Exhibits include native flowers and animals. A stuffed badger, coyote, deer head, and a golden eagle can be viewed. Important prairie grasses in Illinois, including big and little blue stem grasses are a part of the display. A wetland display and the front of a pioneer cabin are included. "Kids Cave" consists of two small viewing areas that were created by placing windows in the floor. Stalactites, rocks and skulls are visible through these windows. An aquarium houses a single crayfish. Additional aquariums are homes to an albino California king snake and an albino corn snake. There is a cozy Rain Forest Story Corner where a visitor can find a large variety of books. A wasp nest, a bug collection and some nests are available for viewing. Fossils, feathers, bones, shells, molded hoof prints, turtle shells, feathers and arrowheads are also available for hands-on exploration.

The center serves as a rehabilitation facility for injured animals and birds. Currently, two snakes, two owls and two hawks are residents. They will be released back into the environment as soon as possible. Care is taken to minimize their dependence on humans. A great horned owl and a screech owl are permanently disabled and live at the nature center. They are kept as federal and state licensed educational birds. The great horned owl is the largest tufted owl in North America. It is one of Illinois' most common residents. The large feather-like "horns" are not really ears; they are actually located outside of each eye. This particular owl has a permanent wing injury. It is six years old and could live to be forty-six or more. Its favorite foods are rats and mice.

The Great Horned Owl

A second owl named Otus also lives at the nature center. He was found by a family and kept until being confiscated from them. Area residents often contact the nature center to get advice regarding injured animals and birds.

A large variety of educational opportunities exist for area students at the nature center. Activities within the center may occur in combination with some outdoor education adventures. Lessons may center on animals, birds or various plants, flowers and trees. Earth Day events would actually be appropriate on any day of the year. One owl and one snake are available to visit classrooms for informative lessons.

Environmental responsibility is stressed in all programming. Preserving the animals, plants and natural communities that represent the diversity of life is an important focus, according to Phil Johnson. Through the efforts of the Lowell Park Nature Center, humanity's ability to live harmoniously with the environment will be greatly enhanced. Education of persons of all ages from children through senior citizens will help to protect the lands, waters, animals and plants that are needed for all to coexist and survive on earth.

Joyce Dean Stogentin is an Early Childhood Education teacher for the Lee County Special Education Association at Jefferson School in Dixon, IL.

Bomb Building Business in Amboy: The Green River Ordnance Plant

Lynn Longan

As a teacher in the Amboy School District, I became aware of an area just outside of the town called the Green River Industrial Plant. During World War II, this acreage was developed to create the Green River Ordnance Plant, or GROP. Illinois is so rich with history. Sharing this local history with students through speakers can spark interest and relate textbook information of World War II to them personally.

To learn more about GROP, I visited a friend and local historian, Duane Paulsen, author of Memories of the Green River Ordnance Plant 1942-1945. I gathered much of my information from his book. During our interview, he shared more of what he learned while he was researching GROP. His book contains not just the facts of the conception, construction, and final disposal of a munitions defense site, but the memories of the people and spirit of the facility. Following our talk, I took a drive down Corrigedor Road located in rural Lee County.

The solitary drive on a snowy afternoon seemed necessary so that I could witness the Green River Ordnance Plant and visually place some of the employees interviewed and described by Duane in the text. The long lines of interconnected buildings which housed the assembly lines were easily found across the countryside. Other rounded snow-covered structures jutted out from the earth. They could easily be mistaken for random igloo-shaped hills, except for their cement fronts with doors. I saw dozens of mounds similar in shape and size all over the area. These "igloos" were warehouses for the munitions plant.

The idea of GROP and many other munitions plants like it created across the United States was a result of President Roosevelt's National Defense Program. Roosevelt requested immediate rearmament of our nation. Less than a year following December 7, 1941, the "Day of Infamy" at Pearl Harbor, a small town emerged just south of Highway 30 near Amboy. Stewart-Warner had been contracted by the Army to operate GROP, which consisted of 420 buildings across about 8000 acres. Over 4400 people were employed as of October, 1942, with the plant running twenty-four hours a day, six days a week. By January, 1943, seven lines were completed to assemble rifle grenades, heavy armor piercing shells, bombs, and bazookas. From October, 1942, to August, 1945, the plant assembled over 57,000,000 items.

As within any small city, a variety of jobs, in addition to those on the lines, could be found. Employees were needed in the Communications Department, the Safety Division, a weather bureau, a hospital, the Utilities Department, the Mechanical Department, a cafeteria, and the Security Division, which consisted of guards who were trained by the military and were subject to the Articles of War. Aside from the guards, the military was not a prevalent factor in day-to-day life at GROP. This is not to say that strict safety and security guidelines were forgotten. Quite the opposite was true. A former guard told about the Stewart-Warner plant manager, William Steinwedell, who was refused admission one day because he did not have the proper identification with him.

That story and the memories of many other employees from various facets of the defense facility are part of the history of GROP. Those forgotten buildings I witnessed in that afternoon drive are just a reminder of lives that

were an integral part of the war. These workers came from all walks of life. Few possessed the skills needed when they were hired and therefore were trained on the job. Most had the common desire to be a vital part of the war effort. Many were women removed from domestic life and placed on assembly lines in support of husbands, sons, brothers, or friends who had been drafted. One former worker recalled that working at GROP was like being in a different world that was entered and left everyday.

Paulsen's oral resumes of those interviewed in the book describe job objectives ranging from difficult manual labor to fine precise measurements of explosives. Some low risk tasks included nailing frames together, unloading and loading trucks, filing down nicks to correct defects in cases, and painting and stenciling shells. The more dangerous the job, the higher the wages. Some specific examples include inserting cordite, ring and washer into bazooka rockets after liquid explosives had been poured, operating crimp machines after explosive powder had been pressed into shells and pellets added, and filling bazooka shells with hot melted Pentolite, a powdered explosive. Even though riskier jobs paid more money, the employees rarely worried about the danger of the jobs. Only one fatality occurred on the line during the lifespan of GROP-- a woman on the rifle grenade line.

The recurring themes among many former employees were patriotism and loyalty. "If the ammunition was needed, I was needed too." is a quote from a female worker interviewed by Duane. Another woman said that, "Women were the United States secret army since Hitler had said that American women never helped in the war effort, that they only went to the beauty parlors and played cards." The employees at GROP made earnest efforts to aid the war endeavor. Many recalled instances of co-workers receiving news of the loss of a loved one, only to return to jobs the next day and continue working toward peace.

Even quicker than the facility was built, the plant closed at the end of World War II. Little was noted in local newspapers as thousands of workers were jobless. Decontamination, a thorough cleaning from floor to ceiling to remove all of the powder, was completed by September 1, 1945.

The interviews in Duane's book give life to those empty buildings and "igloos" left standing in what is now referred to as the Green River Industrial Plant. He was able to capture the rich oral history through the memories of many former workers. The physical remains of GROP recall the people from various backgrounds that converged to achieve one goal: to do their part for the war effort. As a result, women were liberated and friendships began. People met future spouses and lives were shared. Those people were never the same again.

As Duane and I talked about GROP, his love for uncovering true history and the stories behind the facts was contagious. He showed me computer files of his latest project, the story of Grand Detour, Illinois. We even followed up with a stroll through the cemetery near his home in Grand Detour and he shared some of his latest discoveries. I couldn't believe how exciting local history could be - and all without a textbook or classroom. Imagine that!

Lynn Longan is a seventh and eighth grade math teacher in Amboy. She resides in Dixon.

50

What You Do Know Can Health You by Roberta Fredericks

Where would you look if you wanted to learn about lead poisoning? How about sexually transmitted diseases or ground water pollution? Give up? The Whiteside County Health Department offers presentations on these subjects and many others. Services offered include WIC (Women, Infants, Children) which is a supplemental food and nutrition education program, Lead Screening, Immunizations, HomeCare-Pediatrics, Family Planning, Family Case Management, Infectious Disease Control, HIV Counseling and Testing, Vision and Hearing Screening, Environmental Health, Pediatric Primary Care/Prenatal, and Prescott Dental Clinic.

In the area of Health and Nutrition the following courses are offered: Basic Infection Control, Oral Health, Lead Poisoning Prevention, Nutrition, Eating Disorders and Safe Food Handling. *Basic Infection Control* is a thirty to sixty minute program targeting grades 6th through 8th. It covers infection control and transmission prevention, with an emphasis on hand washing. Demonstration of tooth brushing and other tooth care, including what to expect at a dental visit are covered in the *Oral Health* presentation. It also includes nutrition as it relates to healthy teeth. A video and class activities are available for preschool through 8th grade which will take thirty to forty five minutes to complete. A thirty minute Sesame Street video is used for preschoolers in the *Lead Poisoning Prevention* presentation. It emphasizes good hygiene for the prevention of high blood lead levels. Information provided in *Nutrition* covers what constitutes an adequate diet for ages preschool through 12th grade. Attention is given to common issues such as healthy snacks, breakfast, fast foods, dieting and weight control. The length is based on age level, so it can last from twenty to sixty minutes including the preparation of healthy snacks. 6th through 12th graders would learn quite a lot from *Eating Disorders*. It lasts forty five to ninety minutes and covers signs and symptoms, seriousness of the problem, and appropriate intervention.

Proper nutrition and appropriate weight loss techniques are reviewed and appropriate referrals can be made. The last topic the Whiteside County Health Department covers in the area of Health and Nutrition is *Safe Food Handling*. This presentation is geared to vocational and home economic students at the high school level. Environmental health staff will augment class work aimed at safe food handling practices in retail and home settings which will take thirty to sixty minutes.

The Whiteside County Health Department offers two topics in the area of Substance Use and Abuse. Tobacco High and Tobacco Education are the two presentations. *Tobacco High* is a class discussion on tobacco related health issues, advertising, decision making and refusal skills. Hand outs and a video are available. It is thirty to sixty minutes in length geared toward 6th through 8th grade. *Tobacco Education* is for preschool through 2nd grade. It is thirty to forty five minutes in length and teaching is done through activity books by the American Lung Association. Health issues related to tobacco and second hand smoke are discussed and children learn how to politely ask adults not to smoke around them. The students will make a "No Smoking" sign to hang on their bedroom doorknobs. In the area of Sexuality there are four topics that can be used in the classroom. The topics are Responsible Sexuality, Baby Think It Over, Family Planning, and STD, HIV, Prevention.

All four topics are for ages 7th through 12th grade. *Responsible Sexuality* is a class discussion on the responsibility that accompanies sexual activity and the consequences of poor choices,including sexually transmitted diseases and HIV. The class is pro-abstinence which emphasizes good decision making, refusal skills and setting future goals. This session can last forty five to ninety minutes and the video "Sex, Lies, and The Truth" is available. *Baby Think It Over* uses three class periods on three different days. Computerized dolls are used which have been programmed to cry periodically. Students are required to care for the dolls for 48 hours. Class time includes a pre/post test, the "Responsible Sexuality" presentation with emphasis on decision making and goal setting. A class discussion about the responsibility of parenting and basic infant care is also included. An "Empathy Belly" is used to simulate pregnancy and the video is optional. *Family Planning* is forty to sixty minutes in length. It includes a brief description of family planning services, information on all forms of contraception, with samples for students to examine. Included are short discussions on sexually transmitted diseases and sexual responsibility. Interactive discussion on STD and/or HIV basic facts and prevention measures are part of the presentation called *STD, HIV, Prevention.* It lasts thirty to sixty minutes and may include demonstrations of prevention measures at school staff discretion.

Mental Health Issues is the only topic listed under the area of Social Skills and Relationships. It is a thirty to sixty minute program for ages 7th through 12th grade. General presentations given by a licensed social worker include such topics as forming healthy relationships, managing stress, anger, coping with a crisis, identity/self concept, getting organized, and personality types and disorders. Presentations can be modified to meet the needs of that particular classroom.

In the area of Safety and First Aid, the Whiteside County Health Department offers, *Groundwater Pollution*, which lasts forty to fifty minutes. The Environmental Health staff presents an actual incident in Whiteside County of groundwater pollution involving point source vs non-point source contamination to 9th to 12th graders.

Vocational Days is a presentation that is not listed under any specific area. It lasts thirty to sixty minutes and is for 7th through 12th graders. All aspects of a nursing career and related vocational opportunities are described. Demonstrations of nursing equipment such as a Blood Pressure Cuff, a Pulse Ox which measures oxygen prefusion and Doppler which picks up an infant heartbeat or clots in a vein are among those included.

As a health instructor I have used several of these presentations in my classroom. I think it helps students to hear information about subjects from someone other than the teacher. Students seem to pay more attention, and what is taught is being reinforced by another source making a greater impression. One of the benefits of using the health department is that they are very up to date with statistics and other available resources.

One problem which may occur would be scheduling the presentations. My recommendation would be to make sure to schedule well in advance. Also, it might be easier to schedule if you have several dates for the presenter to choose from. The Whiteside County Health Department can be a wonderful resource for the classroom teacher to draw from and they really want to help you educate your students.

Roberta Fredericks, a 1975 graduate of Illinois State, teaches Physical Education/Health at Sterling High School grades 9-12. She is a certified Red Cross Instructor in CPR, First Aid, Swimming and HIV/AIDS.

"The Banditti"

By:

Mary Miller

Cattle thieves? Stagecoach robbers? Counterfeiters? Yes! All hid out in the swamps that sprawled across the Rock River valley lowlands in the 1800's. Outlaws hid in the 10-12 feet tall swamp grasses in these gloomy, tangled and unknown areas that are now gone.

The cattle rustlers and robbers are now a part of history cleaned out by vigilantes. And alas!, so are the tall, natural grasses. In their place are orderly rows of corn and soybeans- scarcely a place for a weed to hide, much less a bandit!

The Whiteside County Natural Area Guardians (NAG), formed as a sub-committee of the Whiteside County Soil and Water Conservation District in 1988, is a dedicated group of volunteers whose main goal is to preserve the remaining natural area, flora, and fauna. According to David Harrison of the United States Department of Agriculture, NAG's main goals include locating and preserving local natural areas. The group also encourages management of the natural areas and assisting landowners with natural land management.

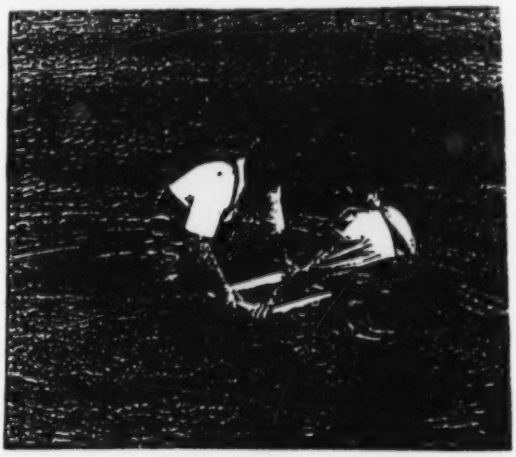
Establishing seed banks of endangered species has greatly helped to preserve the remaining natural areas of Whiteside County for future generations. There is a 70-acre wetland in the northwest corner of Montmorency Township that is currently being leased and managed, while five cemetery prairies are also under NAG's caring eyes.

When asked if a small group could make a difference, Margaret Mead replied, "They are the only ones who make a difference." The growth of NAG groups in Illinois is one of the most positive steps being taken to save what remains of our local natural heritage for future generations.

Preservation used to be the sole remedy for natural systems under stress. However, putting fences, legal and otherwise, around species or even whole natural areas has proven paltry protection in a landscape where natural processes have been upset.

This lesson was brought home with unhappy force in the Lower Rock region. The prairie chicken once flourished here. The bird was so numerous that one quartet of hunters from the East could take as many as 250 birds in a day. Some hunters even shot from their carriages as they bounced over the prairie. Local populations were decimated, and in 1940 the state purchased the Green River Conservation Area as Illinois' first prairie chicken sanctuary. Local populations dwindled anyway, and the last bird was seen in 1959.

More recent attempts to preserve local populations of birds have had better luck. For example, double-crested cormorants, once seemingly doomed to vanish from Illinois, now are a common site along the Mississippi, Rock, and Green rivers in breeding season, thanks to cleaner water and bans on hunting.



Field trips and educational programs are available to educators by contacting Karen Berridge @ (815) 772-2124 ext. 3. She states "The ability to view a delicate shooting star or a vast sea of purple coneflowers in bloom is perhaps the most precious legacy you can pass on to your children".

1997 State Goals and Illinois Learning Standards

State Goal 1: Read with understanding and fluency.

A. Apply word analysis and vocabulary skills to comprehend selections.
B. Apply reading strategies to improve understanding and fluency.
C. Comprehend a broad range of reading materials.

"The Banditti"

By:

Mary Miller

State Goal 12: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences.

A. Know and apply concepts that explain how living things function, adapt and change

B. Know and apply concepts that describe how living things interact with each other and with their environment.

State Goal 13: Understand the relationships among science, technology and society in historical and contemporary context.

A. Know and apply the accepted practices of science.

B. Know and apply concepts that describe the interaction between science, technology and society.

State Goal 17: Understand world geography and the effects of geography on society, with an emphasis on the United States.

A. Locate, describe and explain places, regions and features on the earth.

B. Analyze and explain characteristics and interactions of the Earth's physical systems.

C. Understand relationships between geography, factors, and society.

D. Understand the historical significance of geography.

Suggestions for specific class activities to achieve state goals:

1. A class trip to the school library
2. A class trip to the public library
3. Utilize technology program-"Scholastic

Reading Program"

State Goal 12/13/17

1. Request high school physical science teacher to "buddy up" with your class
2. Guest speaker Karen Berridge(815)772-2124
3. A class trip to the Museum of Natural Science

Mary Miller is a Kindergarten teacher in Unit 5 in Sterling, Illinois. She enjoys reading, traveling, and agriculture.

The University of Illinois Extension: Putting Knowledge to Work

By
Janet Eden

As Stan Eden's daughter, I have had the opportunity to observe what the University of Illinois Extension (UIE) offers schools. Stan Eden 's current title is Extension Unit Educator Crops/Environment. He has been part of Extension in Ogle County for thirty years. UIE's mission is also a mission of all good educators -- "helping the people of Illinois [or students] put knowledge to work" (University of Illinois Extension, 1999). Students must be able to find the information they need and then apply it in a meaningful way. In this article I aim to put my knowledge about UIE to work for teachers.

As teachers we want to give our students accurate information. The information and advice coming from UIE is supported by scientific research. Some of this research is conducted at a national level by the United States Department of Agriculture; however, research done at the state Land-grant College -- The University of Illinois-- is the primary source of research validating the information that comes from UIE (S. Eden, personal communication, March 31, 1999). The Extension educator then takes this research and makes it accessible and understandable to the citizens of the local county or unit area. For example, conducting scientific research experiments or tests in local farmers' fields -- demonstrating suggested farming techniques, testing new seed varieties, different herbicides or insecticides -- are effective ways of sharing information. This involves people in producing the data they will use to support decisions they make for effectively using such resources as land, time, money, and equipment. From this educators recognize that effective research is unbiased and is conducted under conditions that closely resemble those to which the information will be applied. People engaged in what they are learning better remember and understand the knowledge gained as they put it to work on their own.

While visiting places such as fields, the soil testing laboratory at the University of Illinois, other offices on campus, and the UIE Ogle County Unit office, I have observed the link extending University of Illinois research to the county and individuals. It is the person out in the "field," i.e., Extension Unit Educators, Extension Unit Assistants, Extension Unit Leaders, and the secretaries. Occasionally family members and I have volunteered helping to put newsletters and other mailings together. These mailings announce such upcoming events as Farm Visit Day, planning meetings, the Ogle County Fair, and programs on landscaping your home, buying a home for the first time, or information about the 4-H School Enrichment programs and activities the UIE staff offers local schools. Information is also shared with people through radio spots, news columns, and by talking directly to people in the office, over the phone, or meeting with them in their places of business. In education we all experience the need to use a variety of methods in order to communicate information to as many people as possible.

UIE shares information with the youth of Ogle County through 4-H-sponsored programs and activities that emphasize active learning. Evaluation and effective communication of what has been learned are important steps in the completion of every 4-H project. To receive credit for completing a project, it must be displayed and evaluated. My favorite part of helping judge 4-H projects is the opportunity to talk to the 4-H members and discuss what they have learned and the process they used to complete their project. A lot of learning goes on before the final product is finished. In recent years, education research and the Illinois Learning Standards suggest placing a greater emphasis on communicating the problem solving process used (Illinois Learning Standards, 1999). The main focus of 4-H has always been education by studying specific topics of interest and the development of life skills to be used in areas beyond the specific topic. Leadership, communication, and critical thinking are some of the skills 4-H programs and activities help teach. Through 4-H, UIE is extending its services to more clients. The many learning experiences offered give youth in urban and rural settings opportunities to explore areas of interest (S. Eden, personal communication, March 31, 1999).

4-H is expanding the settings in which it offers programs. In addition to the traditional 4-H club that meets regularly through the course of a year, now special "school-based clubs" form and meet for a short

period of time to complete a 4-H School Enrichment project. Class members create a display to show what has been learned. Then the classroom teacher or other people from outside the classroom judge the projects.

To learn the programs and resources are offered to schools, I called my local Extension Unit Office and asked to speak to the 4-H contact person (S. Anderson, personal communication, April 21, 1999). In Ogle County this was Debbie Moser, Extension Unit Assistant Youth and Family. During the 1998-99 school year, the unit office staff members worked together to offer eleven different 4-H School Enrichment programs. The programs target audiences ranging from pre-kindergarten through high school and relate to many learning areas. For instance, seventh grade consumer education can be enriched with the "Welcome to the Real World" program, and third through fifth grade students will learn about how they can care for the Earth in the "Earth Day is Every Day" program. These are only a few of the programs offered. A list of all the programs offered this year is included at the end of this article.

The "4-H Embryology Project" is another popular program. It is hard to top the excitement of "chick hatching day" after students have prepared for this event over the course of four weeks. In week one, the UIE staff delivers equipment. Students and their teachers test everything, learn how to use the equipment, and keep the incubator at the proper temperature. The eggs are brought to the school in week two. For the next twenty-one days students care for and study the eggs. Through candling, students can observe the development of the chicks. Then the long awaited day arrives. The chicks hatch! The class continues caring for the chicks a few more days letting people see the results of the activities they completed.

Using a little creativity, this project can be adapted for use with students of all ages and in several learning areas. For instance, keeping records of the incubator's temperature uses math skills and studying the chicks' develop is a science application. Informative as well as creative writing opportunities exist. Students are often eager to explain the results of their project to interested people, and have the project evaluated. This offers an opportunity to practice good oral communication, and earns the recognition that comes with being a part of a special interest 4-H club. All the necessary equipment, including a student project book, and teacher's manual is provided.

From year to year and unit office to unit office, the projects and activities offered may differ slightly depending on available resources and the expertise and interests of the professional staff (D. Moser, personal communication, March 17, 1999). It is important for teachers seeking resources in the areas of agriculture, home economics, 4-H, youth, and community development to contact their local UIE unit office to see what they offer schools in their county or unit area. In addition to those advertised, the UIE staff is willing to design and conduct special programs teachers request when the resources are available (D. Moser, personal communication, March 17, 1999). If you have an idea you want some help with, the UIE staff is willing to do all they can to work with you on that idea. If they are unable to help, they often are able to help find someone who can. The nature of their jobs allows the professional staff in the extension office to meet and work with many people from many walks of life throughout the county or region they serve. Many times the extension staff will know other people within the county who would be available and willing to help a teacher as a further resource (S. Eden, personal communication, March 31, 1999).

Watching my father at work and participating in 4-H activities myself has shown me how education works in many settings in and out of the classroom. I am putting much of what I've learned to work in the various setting in which I teach. The staffs of the UIE unit offices extend the University of Illinois' outreach to local classrooms and through the classroom to teachers and children helping them learn skills for putting knowledge to work.

> *We try to keep good communication with schools in the county. In the last ten years, our schools have begun to recognize us as a resource that might be useful to them. It is our goal to let people know about available resources.*
>
> *Come and ask for a resource, and we will try to make it work for you. That is an important part of our job.*
>
> *–Stan Eden, Extension Unit Educator Crops/Environment, March 31, 1999*

Janet Eden coordinates Talented and Gifted Education Services for students in the Oregon Community Unit School District #220. She has been an educator of gifted and talented students for nine years.

References

Illinois Learning Standards. (1999). Slide Presentation. [On-line]. Available: http://www.pda.k12.il.us/HTML%20Presentation%20folder/sld016.htm

University of Illinois Extension. (1999). [On-line]. Available: http://www.ag.uiuc.edu/

Ogle County 1998-99 4-H School Enrichment Offerings

(D. Moser, personal communication, March 17, 1999)

Welcome to the Real World

Target audience: grade 7. *Description:* An active, hands-on, real-life simulation which provides students the opportunity to explore careers and make lifestyle and budget choices similar to those adults face on a daily basis.

4-H Embryology Project

Target audience: all grades. *Description:* As a special interest 4-H club, classrooms will gain access to kits containing everything needed to conduct a 30-day investigation of the development of life. All teachers need to add is TLC and creativity.

4-H Bread Programs

Target audience: grades 1-3. *Description:* After tying on aprons, students measure and mix ingredients to create homemade loaves of Honey Bear Bread. Teamwork and the roles of various ingredients are stressed. In the end, each student has a loaf of bread to take home and share with the family. Extension staff leads bread presentations, and teachers receive an educational packet to use in the classroom.

Earth Day is Every Day Programs

Target audience: grades 3-5. *Description:* This program brings Extension staff into classrooms for 45-minute presentations of short lessons and hands-on activities. Topics change from year-to-year. Students discuss the on-going importance of the topic, as well as its impact on their future.

Walk in My Shoes Intergenerational Experiences

Target audience: grades 2-5. *Description:* Just how old is old? Are all older people the same? Students will explore these questions and more during a 50-minute hands-on presentation by Extension staff.

4-H Focus On Character

Target audience: grades 2-4. *Description:* Through hands-on activities and philosophical discussions, this project teaches youth to value the Six Pillars of Character: trustworthiness, respect, responsibility, fairness, caring, and citizenship. Sound decision-making is also addressed. A kit containing all of the materials and equipment necessary to conduct a seven-session study of character education accompanies the project.

4-H Hand-washing Activity Kit/Presentations

Target audience: grades 2-4. *Description:* Teach your students to wash their hands with skill. Students complete a simple activity that shows them how clean their hands are getting when they wash. Using a special lotion and black light, students actually see any germs they missed. A limited number of presentations conducted by Extension staff members are offered. Kits for teacher use are available during months when presentations are not scheduled.

Gifts of Gold

Target audience: grades K-2. *Description:* This exciting project uses jokes, a computer game, songs, a story, and opportunities for family involvement to teach youth about our American heritage and the important part CORN has played in our culture. While learning about one common, international food, youth will explore agriculture, literacy, nutrition, diversity, science, art, communications, and horticulture.

Family Activity Nights

Target audience: families of early childhood, pre-K, and K students. *Description:* These 1 - 1 1/2 hour programs are available to teachers working with targeted audiences. Extension coordinates 5-6 activity stations at which families create, learn, and grow together as a team. Stations may feature such activities as simple crafts, science experiments, and family projects. Scheduled as staff time permits. There is a minimal charge per participating family.

4-H Culture Kits

Target audience: any. *Description:* These kits are available on a loan basis during certain months of the year. Kits contain artifacts from specific countries. They may also contain such items as literature, audio-visual resources, game ideas, and recipes.

"Connecting with Kids" Newsletters

Target audience: parents of grade school students. *Description:* This quarterly newsletter is offered to schools for distribution to district families. An Extension Educator generated resource, issues deal with topics ranging from child development and discipline to balancing work and family. Newsletters are available in various formats designed to meet the needs of specific school buildings.

Catch of the Day

By:
Karen Mayberry

The sun sparkled across the lake on a beautiful May afternoon. Excited voices danced along the banks as a dozen five and six-year olds cast their fishing lines in hopes of catching "The Big One." (Yes, there were a dozen children and they had real hooks at the end of their lines, too!) Just down the shoreline a dozen more children practiced casting with real poles and "weights" and in a nearby grassy area, twelve more learned about the food chain while playing a game of tag. Another group of twelve returned from a nature hike to explore local plants and wildlife and settled into the grass for a snack of "poles 'n fish" and milk. (Poles 'n fish is a snack of straight pretzel sticks and fish shaped crackers.) All around the area parents and grandparents helped kids learn to cast, bait hooks or reel in a fish. Other parents passed out the pretzel sticks and fish crackers and still others untangled fishing lines or snapped pictures of various children holding their catch. Among the children, parents and two teachers are six rangers who organized and led most of the activities. Not only did they organize and lead activities, they brought all the fishing poles, equipment and bait that was needed. It was another successful year at our third annual kindergarten "fishing trip," thanks to the Illinois Department of Natural Resources.

For a full week every year in April, the elementary students get lessons on casting in their gym class. Their voices ring out across the gym as they cast fishing poles with weights on them into large hoop "lakes" and catch various sizes of felt fish with the Velcro on their "hooks." "I've caught three fish!," shouts a little girl. "I have to throw this one back "cause it's too small," mentions another child after measuring his latest "catch." In the gym are two rangers, who come to help the gym teacher present the lesson and bring along the necessary practice equipment. At the end of the week all the children take home coloring/activity books about fishing.

On another spring day, 200 kindergarten through second grade students sit on the gym floor in awe as two rangers reach into a large tank and pull out live fish. "That's a bass!" calls out one boy. "Hey, my dad caught a catfish once," yells out another a few minutes later. The rangers give facts about each fish as they walk around the gym telling the children what each species likes to eat, where they live in the lake and giving tips on handling the fish. This assembly was a follow-up to a gym class program started by our school's gym teacher and Karen Anderson from Department of Natural Resources.

A different day, in the summer, twenty boys and girls in third through sixth grade, sit around the program room of the local library. Today the summer reading program at the library has invited Karen Anderson and some fellow rangers, to do a fishing workshop with the children. As the rangers explain the different species of fish and how to handle them, several children offer their own experiences with fishing. A few minutes later, the children are busy with pieces of fishing line and large hooks, as they carefully try to tie their own lines to oversized practice hooks. Outside the library lays an enormous blue tarp, spread open across the grass. The children gather around excitedly with practice poles that are "weighted" and "Velcroed." Again, the felt fish are strewn about the tarp and the children cast their lines in hopes of "catching fish." If they succeed, they then have to measure their fish and decide whether they must throw it back or if it's a keeper. If it had been possible that day, the children would have been transported to a nearby lake for a real fishing experience similar to the one the kindergarten classes experienced on their field trip.

Over the last few years, the Department of Natural Resources has been pleased to offer these types of programs to people of all ages in the Whiteside County area and beyond. They have given fishing workshops for children as young as kindergarten up to senior citizens in nursing homes. Karen Anderson, one of the directors of this program enjoys bringing these natural experiences to the children. She and other workers in her office spent

many hours the first year of the program, making the felt fish used for practice casting. Karen believes that the children should have basic knowledge of the types of fish one might catch in the area and tips on handling them when taking them off the line. The rangers are also sure to teach rules and safety tips that everyone needs to remember while fishing and explain who needs a fishing license. The depth of skill the children are taught is judged primarily by their age. Younger fishers might get the lesson on casting and just a light lesson on fish types and handling. Older students are given more facts and are taught to tie the fishing line to the hook To really make the experience meaningful, the rangers prefer to end the fishing workshop by bringing the students and equipment out to a real lake or river and letting everyone do some real fishing. There, safety tips and baiting of hooks can be reviewed while rangers and other adults are on hand to assist when necessary.

Karen is flexible with the program and can tailor the different parts of the workshop to fit the needs of most groups by size, age or location. Let her know what kinds of activities you are interested in and she will most likely come up with a workshop to suit your needs! The Department of Natural Resources does not charge for these services and will provide all the equipment needed for the workshop. Give Karen a call and soon you'll hear excited voices calling out, "Help!, I think I caught the big one!"

Karen Mayberry is a sixth year kindergarten teacher in Morrison, Illinois.

Discover "E"

"E" IS FOR ENGINEERING

By DAN ARICKX

WHERE WILL YOU BE IN TEN YEARS? Designing spacecraft to explore the planets? Building nuclear power plants to power cities? Saving lives through new laser applications? Applying computer technology to solve 21st century problems?

As an engineer, you will be on the cutting edge of technology helping humanity by improving conditions around the world.

Engineers help solve many of the worlds problems.

DISCOVER "E" is a program sponsored by the National Society of Professional Engineers. The program is intended to raise the awareness of the need for science and mathematics education and to bring the exciting work of engineers to the attention of students.

The following article is a summary of some of the information that is discussed during a presentation by an engineer who would visit your classroom during National Engineers Week each February.

PREPARING FOR THE CHALLENGE.

One of the main points of emphasis the Discover "E" presenter will communicate is the importance of a good education including the following classes during High School:

> Algebra I & II
> Geometry
> Trigonometry
> Calculus
> Biology
> Physics
> Chemistry
> Social Studies (3 units)
> English (4 units)
> Foreign Languages (2-3 units)
> Fine Arts/Humanities (1-2 units)
> Computer Programming or Computer Applications

They will also mention the advantages of advanced placement or honors level courses. To enter an engineering program students should plan on needing combined scores of 1100 (SAT) or 28 (ACT).

The ability to work in groups and leadership qualities can be practiced in high school. The presenter who visits your school will encourage students to take charge and act as leaders.

AFTER HIGH SCHOOL. Engineering is a difficult major. It requires a considerable amount of time and energy. A bachelor's degree in engineering is available through:

> A four or five- year accredited college or university program;
> Two years in a community college engineering transfer program plus two or three years in an engineering program;
> Three years in a science or math major and two years in engineering;
> Five to six years in an engineering co-op program;
> Eight to ten years as an evening engineering student.

To begin their careers engineers receive a bachelor's degree in engineering. An engineering technologist's bachelor's degree is in engineering technology. This is the person who translates the engineer's designs into systems and projects. The engineer who creates the designs, collects and analyzes data, inspects work, checks and repairs equipment, and prepares reports for the engineering team is called an engineering technician. Engineering technicians usually complete two years of study to earn an associate's degree after high school.

"E" is for Engineering

(continued)

Join the race to find a cure for cancer, AIDS, and other deadly diseases.

ENGINEERS TURN IDEAS INTO REALITY. Engineers are problem-solvers who apply scientific and mathematical concepts as well as common sense to solve problems facing humanity today and tomorrow. It is important that an engineer be able to work well in groups to complete projects. When engineers work together they function as an engineering team.

Chemical engineers seek to make our world better by devising systems to control pollution by trapping harmful pollutants before they spread into the air; looking for hardier strains of wheat, rice, and corn to survive drought, insects, and disease to ease world hunger; and joining the race to find a cure for cancer, AIDS, and other deadly diseases.

Civil engineers design solutions to cope with many of earth's most serious problems-polluted air and waters, decaying roads and bridges, overcrowded airports and highways. They also design the transportation systems needed to colonize the moon and beyond.

Other types of engineers include: Automotive, Aerospace, Agricultural, Architectural, Ceramic, Computer, Environmental, Fire protection, Geological, Geothermal, Industrial, Manufacturing, Materials, Metallurgy, Mineral and Mining, Naval, Nuclear, Ocean, Optical, Petroleum, Plant, Plastics, Robotics, Safety, Software and Transportation.

YOUR CAREER AND THE FUTURE. According to the National Society of Professional Engineers there will be many jobs for engineers during the next decade. Jobs that pay considerably more than other jobs that also require a bachelor's degree. Sometimes this can be as much as 75-100% more per month depending on geographic location and engineering specialty. In a recent survey it was found that the median salary among experienced engineers was $70,000 a year.

THE DISCOVER "E" PROGRAM is an excellent way to inform students of some of the possibilities that surround them and the importance of a good education. Last February I took advantage of this program and had a civil engineer visit my classroom. He showed my 8th grade students an example of what he does which in this case was a set of plans to replace a stretch of road next to the middle school in Rock Falls. The presentation was not only beneficial to the students but it also met many of the Illinois State Learning Standards (see Box A). If you think your students would benefit from the Discover "E" program contact Mr. Thomas Houck of the Rock River Chapter of the Illinois Society of Professional Engineers at Willett, Hofmann & Associates, Inc. (815) 284-3385. The presentations are available during National Engineers Week in February and last approxiamately 30 minutes to an hour.

Box A

Language Arts
State Goal 3: Write to communicate for a variety of purposes.
State Goal 4: Listen and speak effectively in a variety of situations.
State Goal 5: Use the language arts to aquire, assess, and communicate information.
Mathematics
State Goal 6: Demonstrate and apply a knowledge and sense of numbers ...
State Goal 7: Estimate, make and use measurements of objects ...
State Goal 8: Use algebraic and analytical methods to identify and descibe patterns ...
State Goal 9: Use geometric methods to analyze, categorize and draw conclusions ...
Science
State Goal 11: Understand the processes of scientific inquiry and technological ...
State Goal 12: Understand the fundamental concepts, principles and interconnections ...
State Goal 13: Understand the relationships among science, technology and society..

***Dan Arickx** *is an 8th grade math teacher at Rock Falls Middle School in Rock Falls, IL. He is also Department Head, Athletic Director, and Chairperson for a six district math committee. He previously taught in Houston, TX.*

What is Heritage Canyon?

by

Fran Smith

If you are looking to add a little spice to your social studies curriculum, then Heritage Canyon in Fulton, Illinois is for you! Heritage Canyon is a 12-acre wooded nature walk dotted with exhibits that take the visitor back to the 1800s. The development of Heritage Canyon was the dream of the late Harold and Thelma Wierenga who bought the property in 1967. They transformed what was once a limestone quarry and junkyard into a beautiful and unique combination of history and nature.

As they began their ambitious project, they kept two goals in mind. They wanted to preserve Midwestern history through attention to detail and authenticity. In addition they wanted to preserve and incorporate the natural wooded surroundings as the buildings were constructed. Young and old alike will enjoy and appreciate what Heritage Canyon has to offer. So sit back and relax as you journey over 100 years back in time to experience the daily life of Illinois pioneers.

As you arrive at Heritage Canyon, the sloshing waves of the Mighty Mississippi River echo the glory days of churning paddle wheel steamboats. If you are lucky, you may even catch a glimpse of the present day Mississippi Belle II steamboat as you begin your historical experience. Turning to the east, a path leads you past the Wierenga's modest home complete with small ponds and waterfalls to the entrance of Heritage Canyon.

A wooden and glass framed information stand provides directions, information, and rules for your self-guided stroll through time. No admission is charged, however donations are accepted to assist with the upkeep and for funding of future exhibits. A picnic area is available for accommodating those with sack lunches. Bathroom facilities are available in the form of a modern, well-kept outhouse!

As you follow the clearly marked and numbered arrows, you first pass a large sundial representing the beginning of your time travel. After passing a well and the Wierenga's home, the path leads to the old fire station and town hall. Housed within this exhibit is an old country pumper fire truck, hand drawn fire hose cart and other fire fighting equipment. Adjacent to the fire house is a wooded picnic area overlooking the scenic Mississippi River.

Continuing on your tour, you pass under a twisted grapevine corridor supported

by a weathered wooden frame. This portal leads to a large swinging bridge made from steel-woven cables. Hang on and watch your step or take an alternative path to bypass the bridge! The path meanders through heavily forested slopes and crosses another bridge before reaching the log cabin area.

Here you will find a log cabin, a tool shed, a root/storm cellar, and the cemetery. Imagine the days of no electricity, no plumbing, no refrigeration, and no fast food restaurants! This exhibit can help your students identify and appreciate how early pioneers survived without these modern conveniences. Antique single bottom plows, wagon wheels, benches, cast iron pots, and wells are surrounded by a split rail fence to complement this rustic exhibit.

The tool shed provides a glimpse into the world of pioneer tools including various hand saws, a large sawmill saw, rope pulleys, and a pedal powered stone grinding wheel. No extension cords or electric power tools here!

The small log cabin is complete with a walk in fireplace, numerous pots and pans, a hunting rifle, butter churn, buffalo robe, bear skin robe, lanterns, rope spring bed, and a loft. Seven or eight family members would have called this cabin home. For protection from wild animals and Indian attacks, the doors and windows were constructed of 3-4 inch thick hardwood.

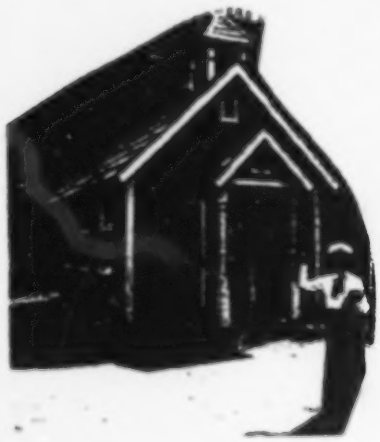
After leaving the log cabin area, the path winds downhill through the forest to a covered bridge that spans 52 feet across the valley. Walled bridges were first constructed to help reduce horses' fear of crossing rushing water. Roofs were later added to shelter travelers. You can almost hear the clip clomp of horse-drawn carriages on their way to the beautiful canyon church around the next bend in the path.

The pure white canyon church is complete with an altar, pulpit, baptismal font, pews, organ, and three bells in the tower. Several wedding ceremonies have actually been performed in the small but quaint church.

Another favorite spot for weddings near the church is the old mill area. Here you will find waterfalls, a water wheel, a fish pond, and fountains. The mill is complete with an authentic millstone that was used for making flour and corn meal. Next the path guides you through a fruit tree orchard on the way to an authentic 1860s home that was dismantled in nearby Garden Plain and reassembled at Heritage Canyon. This house includes a walk-in fireplace with wooden doors and a built-in smoke house for curing ham and bacon. The smoke house is located in a small closet upstairs that is connected to a chimney bypass. Nearby there is also a summer kitchen that was moved intact from a farm north of Fulton.

Next, the path leads down to the floor of the canyon and passes under the covered bridge on the way to the blacksmith

shop and wagon works. No rubber tires will be found here! Here you can observe the many authentic tools used by skilled pioneer artisans during the 1830s. During special events you can see blacksmithing demonstrations.

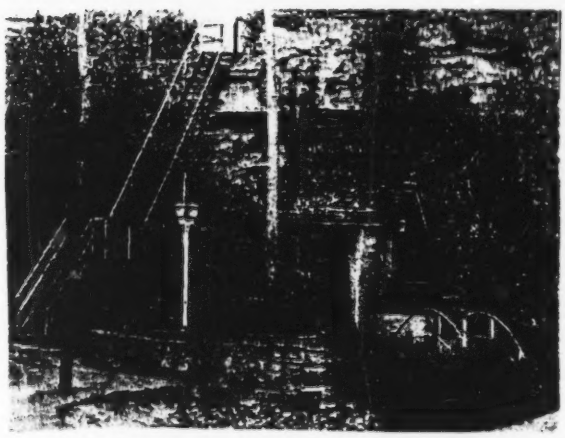


Farther down the wooded path you will encounter the one room schoolhouse. The schoolhouse contains authentic desks, slate boards, and maps from the Park School in Fulton which Harold Wierenga attended as a boy. The school bell is from the Mt. Hope school south of Garden Plain which Harold's father attended.

Next on your journey is a doctor's office complete with antique medical equipment. It is no wonder why so many pioneers died with the crude medical equipment and techniques used over a century ago! Observing this exhibit makes you appreciate the medical advances that followed and improved our health care. As you pass the last few arrows through the beautiful forest scenery, you will approach another sundial that signals the end of your time travel journey.

The Wierengas participate in several special events such as Dutch Days which is the first Friday, Saturday and Sunday in May. There is also a fall festival that takes place on the second Saturday and Sunday in October. Christmas in the Canyon is also celebrated on the Saturday and Sunday after the first Friday in December. At each of these events, The Early American Crafters, the Civil War reenactors, and other historical groups take you back in time as they recreate history in the mid-1800s. Help your students enjoy a unique opportunity to travel back in time. You will be glad you did!

Fran Smith is a Kindergarten teacher at Northside Elementary in Morrison, IL.



INVESTMENTS:

WHO NEEDS THEM?

By:

Jeanne Fuger

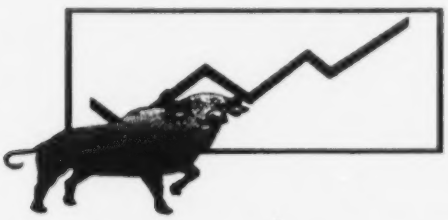
"Edward D. Jones since 1872. Conservative by nature. Not your Wall Street genre. An old line firm." This was some of the background that Kim Pettygrove provided as he spoke to me about the company he represents. Edward Jones has 4600 one-person offices in the United States with some in Canada and the United Kingdom. The company has been rated one of the best investment companies for which to work. I talked with Mr. Pettgrove in order to find some resources for school classes. This article explains what he could provide students in the different subjects areas they may discuss in school.

Mr. Pettygrove was in accounting for over 20 years before he decided to become an investment representative. He never imagined himself a salesman; however he has always enjoyed working with and helping people. Mr. Pettygrove has visited schools and counseled students working on their portfolios. He brings with him pamphlets. The information in these pamphlets range from possible companies to choose , information on investing, and general knowledge of financial planning. He would enjoy bringing his knowledge of the business to your students.

Any class would benefit from Mr. Pettygrove as he relates his first years of work experience. He refers to his "sweat" as equity up front. He talks about patience. The first years of being in business for oneself are hard, long, and time consuming. As he put it, " You don't get paid today for what you do today." This attitude is what students need to experience in classes at school. They want to see now what they will get from taking certain courses. They need to know that the knowledge they learn today will bring them riches later. An example of this logic appears later in my article.

He also talks of how he had to plan his days. He set goals for himself, such as visiting

25 possible customers a day. This included knocking on doors from 8:00 a.m until 5:00 p.m. everyday. Then, later at night, he would hand write personal thank-you notes to each and every person he had visited during the day. He then would plan his strategy for the next day. He mapped out all the streets in an area that he wanted to cover and then started all over the next day. The lesson in planning and being prepared is one that can benefit all students.



What can Mr. Pettygrove offer teachers? If you teach Economics , he can cover areas such as supply and demand, profits and losses, macro economics, micro economics, and general investments. In the area of history, he can describe the stock market crash, the depression, recessions, and bull markets. In math classes, Mr. Pettgrove can cover statistics, ratios, percent, interest rates, and earnings. On general work ethic topics he discusses good work habits, being a self-starter, independence, and patience.

One meaningful scenario Mr. Pettygrove related to me about investing money at an early age and letting it grow for itself follows:

¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢¢

Two men, A and B, start to invest money at the age of 22. Man A invests $2000 a year until he is 30. That is $2000 for 8 years which totals $16,000. After age 30 he does not invest another dime. At a 10% interest rate, which is high and not very reasonable but an easy number to use, at age 65 he has $796,000. Man B does not start investing until age 30, then he puts away $2000 a year until he is 65. This amounts to $2000 a year for 35 years, or $70,000. With a 10% interest rate at age 65 he has only $546,000.

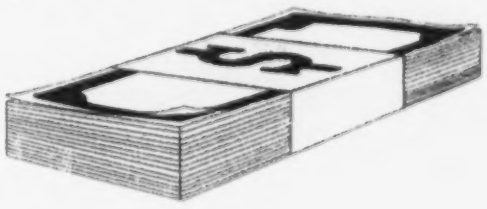
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

This scenario shows that man A invested for only 8 years and earned more money, because he starting investing at an early age.

If you have math classes figure simple interest on sums of money, they will apply this knowledge to their lives. Let your students do a project which involves investing a certain sum of money and watch it grow as it earns interest. This could be a year-long project with each week representing a year of interest.

Mr. Pettygrove is a very good speaker and very interesting in his area of expertise. He comes prepared to classes knowing that students don't want to hear a lecture for 30 minutes. He introduces lots of topics that can be discussed and pamphlets to show possible investments. We need to expose our children to all aspects of business life. This concept of investing at a young age is very important these days. Who knows what will be available when our children want to retire? They need to be well prepared or grandchildren will have to support their parents and grandparents.

Mr. Pettygrove would be a good resource to many teachers looking to enhance their curriculum. He brings with him a good business sense, an excellent work ethic, and many ideas for young investors. In this ever-changing world, teachers are always looking for new ways to make their classes more exciting and to apply the curriculum to the real world. Taking advantage of Mr. Pettygrove's experience is one way to achieve this goal.



Suggested Lesson Plan for a Math Class:

OBJECTIVE: To discover how to compute compounded interest.
To follow an investment over an allotted time span.
Experience why investing early is important.
Apply the knowledge we discovered to real life.

PRE-LESSON: Teach students to calculate compounded interest. Do plenty of examples so students can refer back to the examples.

LESSON: Divide students into two groups. The first group will start an investment at age 20. Let the students decide on the amount they will invest This will give the students a sense of contribution towards the project. The second group will not start investing until they are age 30. Now let the students decide on an interest rate they will earn. Students could research to find the going rates on investments. Let each day represent a year of investing. Do not include Saturdays or Sundays. Students will keep a chart of their calculated interest. Students will also need to decide on an age of retirement where they stop investing and start reaping their rewards.

Chart Criteria: Total possible points -50

Neatness	10 points
Interest calculated correctly	20 points
Creativity on chart	10 points
Followed Directions	10 points

HOMEWORK: Each night student will be expected to fill in the interest for the year. This could count as a daily homework assignment.

Jeantte Fuger is a Mathematics teacher at Polo High School. She returned to school as an adult because of her love for mathematics. Teaching mathematics was a dream come true.

A Fun Filled Day Trip to Tampico, Illinois

By: Deana A. Newman

All aboard!! Our first stop, President Ronald Reagan's Birthplace in Tampico, Illinois. Our 40th President was born on February 6, 1911 in a small apartment above the town's bakery. This tour will give a wonderful timeline of President Ronald Reagan's life. The guide will talk about his birth, his move to Dixon, Illinois, his time as a lifeguard, college, a broadcaster, actor, his political career, and his life up to the present time. Over 2,500 people from all over the world visit this historical site each year.

Upon entering the building, you will see pictures and souvenirs of the President. Displayed in the next room are memorabilia, biographies and magazine articles featuring Reagan's life. On the wall you will see several movie posters featuring Reagan and photographs of him when he lived and visited Tampico. There is also a signed affidavit that proves that he was born in the apartment above. You will hear different stories about our past President and personal memories from your tour guide such as his mother passing our past president through a window while she ran and did her errands and how Reagan got the nickname of "Dutch". During the tour you will take a peek at Reagan's grades when he was in fourth grade. Was he a good student? You will have to wait and find out.

Your tour guide will talk about two other famous Tampico natives. First is Ruth Shaheen, the wife of Hugh Downs. He is one of the co-anchors for the television news magazine 20/20. At a very early age, Mrs. Downs and her family moved to Tampico and went through school there. Admiral J. Mason Reeves is the second famous native of Tampico. He is the inventor of the first football helmet. It has been said that he designed it because he had a bad ear. Reeves was also the admiral on the first aircraft carrier. His picture to the right is also on display.

After looking at all the items downstairs, you will go upstairs to the apartment where President Reagan was born. This six-room apartment is restored with furnishings from that era. As you walk into the southwest bedroom where Reagan was born, you will see a bed, a cradle, and a night stand which has a clock stopped at the time of his birth. This ends our tour of our 40th president's of the United States, Ronald Reagan Birthplace. Are there any questions?

Next stop, The Tampico Historical Museum. It is located just down the street from Reagan's Birthplace. Here you will listen to the retelling of the history of Tampico. On display are several pictures and artifacts that have been donated by people in the Tampico area. Old farm tools, quilts, books, and clothes can be seen. You can see many pictures of families,

people working at their trade, and the city's founding father.

The founder of the village of Tampico is John W. Glassburn. He bought 160 acres at $7.50 per acre This eventually became the village of Tampico. Glassburn donated land for schools, started the grain elevator, and helped establish the first bank in Tampico. He ran a private mail route for the convenience of the people on the route between Yorktown and Tampico. Glassburn also had interests in other business ventures. He was a very successful man and was well respected.

You can view the past editions of Tampico's Newspaper, "Tampico Tornado" which started publication in May of 1876 and ended its publication in 1960. It is always fun to look back and read the past articles, to look at the different advertisements and marvel at the prices from the past. Now it is time for us to go to our next stop.

We are now going to take a short ride out into the country to Evergreen Lawn Farm. It is a registered Holstein farm that is located near Tampico. The owner Oscar E. Koenig owns more than 200 cows.

Mornings work starts very early on this dairy farm. Milking starts at 3:00 a.m. There are different chores that need to be done before and after each milking. It takes about three hours to milk approximately 100 cows. The afternoon milking starts about 2:30 p.m.

Mr. Koenig will take you to see the parlor where the cows are milked, the milk is stored, and the cows are fed. You will be able to see the different preparation that is done before and after each milking. Mr. Koenig will discuss the process he goes through to register his Holstein cows, the preparation and milking of the cows, and different types of records he has to maintain. The records include production sheets, cell count test, and when calves have been born. He will also explain the importance of these records.

When leaving Evergreen Lawn Farm, you will sign a guest register. While viewing the past pages, you will see people from all over the world and from the all over the United States have visited this dairy farm. People from Germany, Japan, China, France, and Switzerland are just a few that have registered in his guest register.

Now we are ready for our last stop before returning to our original destination. We will return to Tampico to Reagan Park to stretch our legs. This park is where Reagan and his brother Neil used to play. In the park is a Civil War statue that stands tall and across the street from the park is the house where President Ronald Reagan lived from the time he was three months old until December of 1914. The house is a private residence and there is no admittance into the house. Now it is time to board to go back home. I hope you enjoyed your visit to Tampico and the Tampico area. Please come back and visit us.

Deana A. Newman is a Title I Reading Teacher at Franklin Center Elementary School in Franklin Grove, Illinois. Title I Reading includes grades 1-6.

70

Illinois Department of Corrections
Dixon Correctional Center (DCC)
By:
Trina Dillon

Have you ever been arrested? Convicted of a crime? Was it a felony or a misdemeanor? What is your legal name? What is your social security number? Here are some rules to follow: no pagers, cell phones, or electronic devices. Dress appropriately for the occasion. You must have a photo I.D. Do not speak to the inmates unless you are spoken to and only respond with a yes or no answer. These are questions and instructions that must be given before a class may visit the Dixon Correctional Center.

Located on the north edge of Dixon, the Dixon Correctional Center (DCC) is the largest medium security facility in Illinois. It encompasses 462 acres, enclosing 120 acres inside the perimeter fence. The facility operates its own power plant, sewage treatment plant, three deep wells, and approximately 3 1/2 miles of underground tunnel systems. It opened in 1983 with a capacity of 1,430 inmates and currently houses 2,138 male and female inmates. The average cost to maintain each inmate per year is $18,371 and the average age is 36 years.

- ***Facility Opened: 1983***
- ***Design Capacity: 1,430***
- ***Medium Security Males and Females***
- ***Average Daily Populaton: 2,138***
- ***Average Age: 36 years***
- ***Average Annual Cost Per Inmate: $18,371***
- ***Number of Employees: 673***

The **Clinical Services Department** has a domestic violence program along with a family services program to provide assistance and coordination of all family-related issues. Included in these programs are prison ministries and parenting classes for those interested inmates.

The **Substance Abuse Program** offers a treatment program to build awareness about drug and alcohol problems within society. Inmates have the opportunity to participate in Alcohol Awareness Week as well as Red Ribbon Week.

The **Health Care Unit** provides medical attention to those in need. The DCC has a 16-bed outpatient infirmary, which provides nursing services, laboratory services, radiographic services, as well as a full range of pharmacy services.

The Adler School of Professional Psychology offers psychologists, interns, and practicum students who provide assistance in sleep disorders, bereavement, male and female health issues and an anti-violence program.

Many educational opportunities are available through the DCC, including Lewis University's applied science degrees, and Roosevelt University's bachelor's degrees. In 1995, 24 inmates received applied science degrees, 15 inmates received an associate of arts degree, and 51 students received vocational certificates.

The **Special Treatment Center** provides a necessary facility for those with special needs (mental or physical). These inmates function better in this center than in the general population. The unit is housed with special safety equipment for the safety of these inmates.

The **Eyeglass Shop** opened in 1994, and manufacturers eyeglass frames for the Illinois Department of Public Aid. More than 52,000 frames were produced in 1995. Only inmates with exceptional behavior are allowed to apply for these jobs, which pays them a salary while incarcerated.

The **Leisure Time Services Department** provides a comprehensive variety of programs and activities for many holidays and special cultural times. Included are activities for the over 40-age group and physically handicapped inmates.

The DCC is a very worthwhile educational expedition since many students have misconceptions about a prison. The common misconception is that prison *punishes* inmates, whereas, the main purpose of a correctional center is *rehabilitation* and *education* since 95% of all inmates will eventually return to society. Death row inmates are the only ones who are not there for rehabilitation. They are simply waiting for their execution date and punishment is the main focus.

> ***Inmate - "Have you ever been to this place before?"***
>
> ***Student - "No."***
>
> ***Inmate - "Don't do anything that will get you here; it's not a place you want to be."***

The Dixon Correctional Center hosts tours for educational purposes. A tour consists of a visit to the honor dorms for both male and female inmates, the eyeglass factory, and the education building. The new "X" house is not available for touring since inmates are locked down 23 out of 24 hours per day. These are the dangerous and/or mentally ill inmates. A 30-day notice is required along with a security clearance for all visitors by issuing the warden each person's social security number. Each individual will pass through a metal detector after signing in at the Gatehouse Reception area. In addition, each individual will be patted down by a security officer, prior to proceeding with the tour.

Lastly, brochures, IDOC newsletters, applications as well as internship information will be given to you on the day of your visit. Mr. Thomas Roth may be contacted at 815-288-5561 for further information.

WARDEN: MR. THOMAS P. ROTH

Tips For Visits

Do:

- **Do** bring a photo I.D.
- **Do** wear comfortable shoes
- **Do** wear appropriate dress (loose fitting, non-revealing clothing)

Don't:

- **Do not** bring any purses/fanny packs
- **Do not** bring gum or food/drink items
- **Do not** bring weapons (i.e., chemical agents, firearms, edged weapons)
- **Do not** bring cell phones or pagers
- **Do not** bring electronic devices or camera equipment
- **Do not** bring drugs or alcohol
- Car keys and prescription drugs may be secured at the gatehouse lockers.

DIXON CORRECTIONAL CENTER (DCC): An Expedition

Grade Level/Subject: 9 - 12 Business Law

Overview:

The relevance and importance of laws are difficult for students to appreciate. Therefore, students appear to have little understanding and appreciation of our legal system. In order to reinforce the concepts or relevance of laws to teenagers, knowledge of business law is appropriate for junior/senior high students.

Purpose:

The purpose of this expedition is to give students first hand knowledge about being incarcerated. Students become active participants in the tour by communicating with a correctional officer, tour guide, warden and possibly an inmate. This expedition takes place after the class completes their study of enforcing the law.

Objectives:

By the conclusion of this activity (classroom and expedition) students will be able to:

1. List specific terminology related to this unit.
2. Explain how criminal matters are investigated.
3. Compare the differences between a criminal and a civil case.
4. Explain why all complaints do not go to jury trial.
5. Explain the differences between preponderance of evidence and beyond reasonable doubt.
6. Learn first hand how a convicted criminal, sentenced to a correctional center, lives.

Activities:

These activities can be amended to fit individual class needs.

1. Arrange for a police officer to discuss: law enforcement, the role of an attorney and judge, and court proceedings.
2. Have groups of two prepare a report on the procedure for bringing a criminal action to trial.
3. From an attorney, obtain a copy of different legal documents.
4. Possibly some student has had an experience with the court system that might be willing to share with classmates.
5. Mock trial.

Tying It All Together:

Our DCC expedition was a successful activity for my students. Students became directly engaged in learning about people who are incarcerated by actively seeking knowledge from experienced professionals. As a result of this activity students better understand the entire judicial process. They gained an appreciation of the process and recognize the importance of our legal system to each and every citizen. If this activity keeps one student from becoming incarcerated, it speaks for itself.

Trina Dillon is a Business Education teacher at Ashton High School. Both she and her students enjoy their annual visit to the Dixon Correctional Center. "If this expedition helps only one student, it is well worth the time and effort," says Dillon.

REFERENCES

Dixon Correctional Center. [Online] Available http://www.idoc.state.il.us/institutions/adult/dix/

Illinois Department of Corrections. Perspectives. February 1999.

Illinois Department of Corrections. Dixon Correctional Center. Dixon, Illinois, 1999.

Stewart, Diane. Personal Interview. 16 April 1999.

Grasslands / Franklin Creek State Natural Area

By:
Connie Jones

"With less than one-tenth of one percent of native Illinois prairie remaining, the Nachusa Grasslands provides an opportunity for people to enjoy a part of this rare ecosystem."(1)

Scientists increasingly see that only large preserves can sustain healthy ecosystems for a long period of time. "Nachusa Grasslands gives us the rare chance to protect a place where our grandchildren's children will be able to stand on a grassy knoll and look out in the distance across a living landscape that is their heritage." (2)We as teachers need to raise the historical awareness of our young people, as well as to restore a healthy ecosystem for a variety of species and natural processes.

The majority of prairie land that has been preserved in the Mid-west is less than one-half acre for any given area, but Nachusa Grasslands currently has 1,020 acres. The Nature Conservancy's goal is to eventually join up with Franklin Creek Natural Area, which is 515 acres in size. Having a large diverse preserve is the only way large populations of birds, butterflies and animals can survive.

At Nachusa Grasslands you can compare various habitats (prairie, wetland and woodland).There are eleven different community types including; dry prairie, tall grass prairie, Bur oak savanna, sand savanna, fen, sedge meadow, and streamside marsh. A great deal of wildlife has been reintroduced to the Grasslands,

thanks to the many volunteers who help manage Nachusa. The volunteers gather prairie and savanna seed and plant in areas that have been devastated for various reasons. They also monitor the bird populations.

Some birds such as the Upland Sandpiper migrate all the way from Argentina. Grasshopper and Henslow Sparrows are able to survive at Nachusa. "Prairie State" wildlife can be seen here also. A lot of rare plant species manage to survive here because of ecosystem protection.

A very good way to start out your field trip would be to ask Sally Baumgardner or other Ecosystem interpreters to give a presentation to your class. Sally has earned a reputation as an "accomplished educator and interpreter of environmental awareness for the last eighteen years" (3) Sally is very entertaining and can give you and your students a very good vision of prairie biomes. She brings live animals and/or slide programs that are exciting for all ages.

Sally has been to Larado Taft Campus of Northern Illinois University to "help

teachers learn to present the concept of prairies to their students."(4)

Sally and her husband Max, work with the Nature Conservancy in restoring the Nachusa Grasslands as well as their own nearby area, Rolling Thunder Prairie..

Nachusa also has a youth stewardship program grade schools and is interested in adding yours to the program. The students

visit and participate in learning activities at Nachusa Grasslands on two seasonal visits (fall and spring), as well as doing learning activities in the classroom before and after the visits. The students can harvest seeds and make sketches to compare the various habitats at Nachusa (prairie, wetland and woodland). They could also research certain plants in the classroom. In the spring, students could plant the seeds in the habitat to which they are suited. They can also study some of the birds and animals in the same way. Other classroom activities include reading from pioneer journals or communicating over the Internet to students in other parts of the country who are also involved in the youth stewardship programs. Most states have preservation programs of some kind, and almost always try to involve young people, because they may be the future caretakers of our ecosystem restoration areas.

The preservation programs in the different states would include different kinds of ecological preserves, depending on the geographical area, but would be very interesting and educational for your students to compare their habitat (plants, animals and land) with other students areas. Two of the local schools already involved in the youth stewardship program are Franklin Center and Ashton Elementary. You could contact the fourth grade of either of these schools for information.

Whether you want to spend part of a day at Nachusa Grasslands or devote time to the youth program, your students could benefit from this opportunity. The grasslands is open to the public for bird watching and hiking, as long as individuals do not harm the area. There are interpretive brochures available to guide you to all of the areas of the preserve. Volunteers conduct tours, bird walks and other events throughout the year. All you need to do is contact the Nature Conservancy for details.

If you were to visit the Nachusa Grasslands in the morning, Franklin Creek Natural Area would be a perfect spot for an afternoon visit.. Franklin Creek has picnic and restroom facilities that are not found at Nachusa Grasslands.

The 515-acre Franklin Creek Natural Area is located down the road and in close to 515 acres. As I said earlier, the Nature Conservancy hopes to someday soon connect these two areas. High rocky bluffs, creeks and woodland forests make up this wonderful and diverse ecosystem. This area provides several distinct communities or habitats for your students to see. Pioneer families established this area in the 1830's, because there were large clear water springs for drinking and "natural refrigeration." The forests provided the wood for building homes and the creek provided fish and waterpower to run the sawmills.

The Franklin Creek Preservation Committee has reconstructed a landmark here known as the grist mill. According to a history gathered by Mary Miller of the Preservation Committee, this mill provided an easier life for the pioneer families.

"Christian Lahman was the son of a mill owner in Pennsylvania and thus knew much about the mill business. He and his son Joseph bought lumber from Whipple' Lumber Mill to construct a three- story building as soon as they built the cabin home. They channeled water from Mill Springs along the mill race to run the water wheel in the lower level of the mill. They installed large mill stones to be turned by the power from the water to grind corn into meal and the wheat into flour."(5)

From the 1830's until 1896, the mill was owned by a few different people, but because of the "decreased water flow" the mill was abandoned.

The remodeling is scheduled to be finished and the mill reopened in May 1999. All of the reconstruction work was done by the preservation volunteers and the mill will be operated by these volunteer of the preservation committee. The third floor of the building will be known as the Learning Center. Visitors can learn all about the history of the mill. The second floor has many displays and learning activities. The walls on this floor are made up of 43 different varieties of trees that are found in this area.The main floor of this building has a display of stones and is the entrance of the mill. The basement contains the equipment that is turned by the 40-ton wheel, which is located outside of the mill. When this project is completed the facility will contain the states only water powered grist mill that is in operation.

Conservation 2000 (C2000) is a six-year program that was set up by the state of Illinois to help with protection of nature within the state, to reverse the decline of the ecosystems. One of the programs established by C2000 is the Department of Natural Resource's Ecosystem Program. This program enables local volunteer groups who want to help maintain these areas. One of the ways that volunteers help is through the C2000 Interpretive Program. They offer educational interpretive programs to schools and communities. This program is available at Franklin Creek Natural Center. By calling the Department of Natural Resources in Oregon, Illinois, one of the educators could be made available to your group.

Overall, I recommend both Nachusa Grasslands and Franklin Creek Natural Area very highly. There are several resource people available to help you bring the environment into your classroom from both of these areas. The list of resources at the end of this article will be of help to you in getting started on some field trips or speakers for your classroom.

My advice to you would be to only take one or two grade school classes or one high

school class at a time to either of these places. Remember, you don't want to harm the natural landscape and both of the preserves are involved in a long restoration process.

I hope you and your students will enjoy the adventure of stepping back into our past and be excited enough to want to help keep our prairies for future generations to enjoy. This can only be done by educating our youth of today of what it takes to keep our ecosystems safe.

References:

(1) Nature Conservancy Prairie Smoke Newsletter. (2/99). Issue 33.
(2) Nature Conservancy Prairie Smoke Newsletter. (9/97). Issue 30.
(3) Rolling Thunder Prairie Nature Activities Pamphlet
(4) Rolling Thunder Prairie Nature Activities pamphlet
(5) Fundraiser planned for grist mill construction. (3/25/99). Ashton Gazette. P.1

RESOURCES:

Nachusa Grasslands Nature Conservancy Lowden Rd. Franklin Grove (815) 456-2340

Sally Baumgardner – Rolling Thunder Prairie 8986 S.Lowden Road Franklin Grove (815) 456-2083

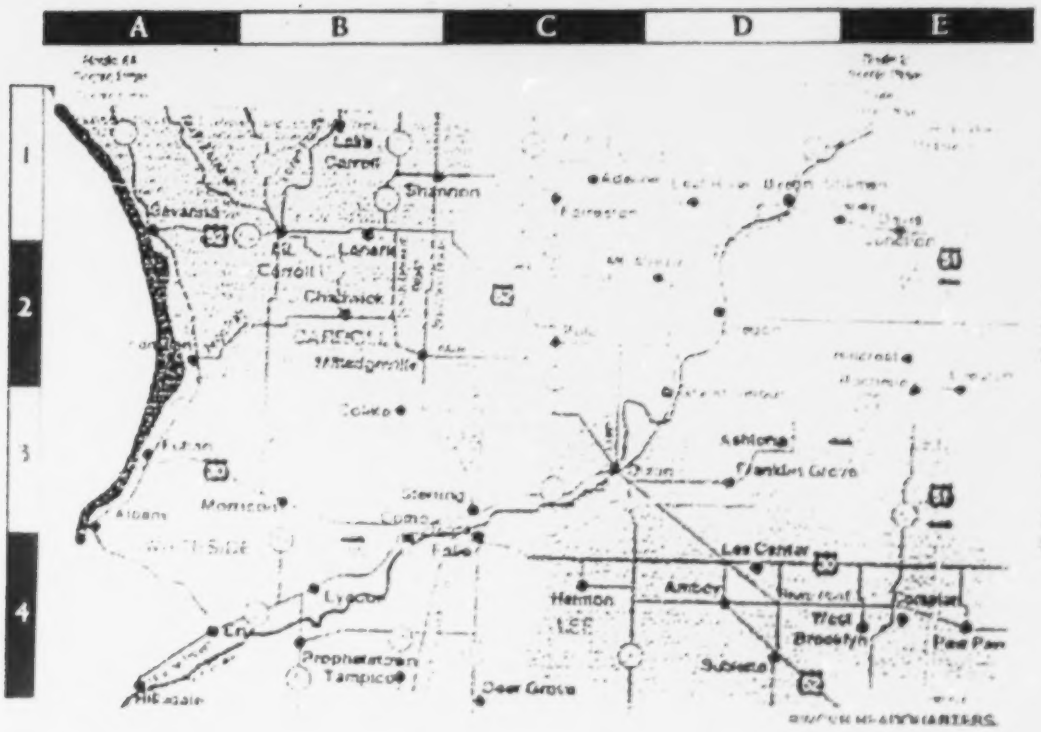
Department of Natural Resources Oregon, Illinois (815) 732-3288 For Ecosystem Interpretor(Paula-EcoWatch/Forest Watch)

Franklin Creek Natural Area 1872 Twist Road Franklin Grove 61031
(815) 456-2878

Franklin Creek Area Preservation Committee 172 Reynolds Road Franklin Grove % Ellen Baker

Websites – Conservation 2000 and Rock River Area

Mrs. Jones is a teacher at Sterling High School, Sterling, Illinois. She teaches Biology and other science courses and is very interested in keeping our ecosystems alive and well for the plants and animals .



Franklin Creek State Natural Area is located between Rochelle and Dixon, just north of IL RTE 38. On IL RTE 38 on the
west side of the small town of Franklin Grove, turn north on Daysville Road and go one block to Old Mill Road. Turn left
(west) on Old Mill Road and proceed one mile to the State Natural Area.

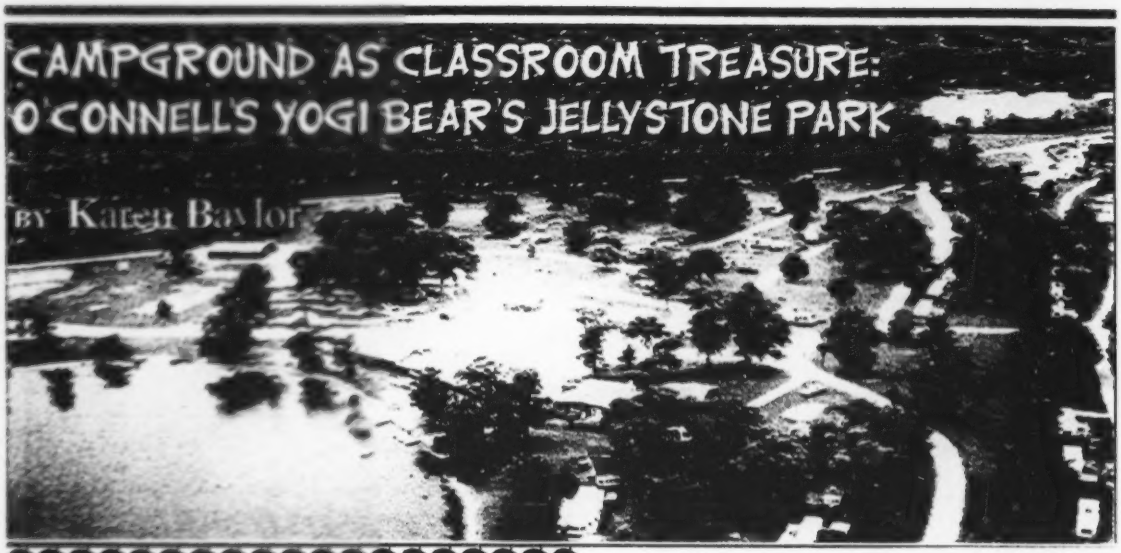
From northerly parts, Franklin Creek State Natural Area is located 10 miles south of Oregon. On IL RTE 64 in Oregon, ½
mile east of the bridge over Rock River is the IL RTE 64/Daysville Road intersection (at the Traffic Light). At this intersection
go south on Daysville Road 10 miles to the small town of Franklin Grove. At the northern edge of town, turn right (west) on to
Old Mill Road and go one mile to the State Natural Area.

Nachusa Grasslands: Nearby cities or towns: Dixon. Oregon. Rochelle, and Franklin Grove

Directions: From Oregon. go east on Route 64 to Daysville Road which is just past the Rock River on your way
out of Oregon. Turn south onto Daysville Road. After 2.5 miles. the road splits. with Daysville Road jogging to
the left. and Lowden Road leading off diagonally to the right. Take Lowsden Road. The preserve will be on your
right (west) about 1/2 mile south of Stone Barn Road. There is a large wooden sign which marks the

CAMPGROUND AS CLASSROOM TREASURE: O'CONNELL'S YOGI BEAR'S JELLYSTONE PARK

BY Karen Baylor



Mother Nature as a teacher? You Bet!

Can a teacher use a campground as an educational tool? Yes! All levels and all ages of students can find nature and its surroundings a plus in their educational growth and development.

A math teacher, at an elementary level can challenge the students to compute angles, circumferences, and other mathematical concepts found in the campground area. An English teacher, at the secondary level, can ask the students to reflect on how nature relates to their current reading assignments. A kindergarten teacher could ask the students to paint or draw a picture of the campground area in their mind and then on paper. Therefore, a visit to a campground can be beneficial for a student's mind.

As luck may have it, there is such a site nearby, called O'Connell's Yogi Bear's Campground. The owners, Dan, and Jane O'Connell have operated the campground for the past 23 years. They are proud to say that it is a family-oriented operation. The O'Connell's emphasize "family" and its importance to their business. They are committed to keeping the campground and its surroundings environmentally friendly. One visit to the campground proves that they do keep their word. The map and directions are included at the end of this article.

The campground officially opens mid-April and closes mid-October. However, the owners would be more than pleased to arrange for classroom visits to the campground at other times during the school year.

The campground has two main natural resources available for outdoor education. First, there are two lakes—Yogi's Lake and Boo Boo's Lake. Boo Boo's Lake is a place for swimming , but there are endless other acquatic opportunities for enhancing education.

English + Math + Art + Science = Nature

A math teacher can prepare questions and problems before going to the lake. Once there, the students would hear a brief history of the lake and then attempt to calculate its circumference. Likewise, a science teacher can prepare questions about the testing of the water and finding certain life forms.

Another natural resource, is the wilderness area. The woods are full of a variety of trees such as; maple, willow, oak, and evergreens, shrubs, and yes, even weeds. Also, there are numerous birds and other wildlife at the campground. The possibilities for enhancing classroom curriculums are vast. Think how a creative writing student could allow her / his imagination to go free.

An English class at any level could expand on their class curriculum with a visit to the O'Connell's campsite. Perhaps, the class is studying the Romanticism period of literature and the current topics are John Keats' "To Autumn", or Emily Dickinson's poetry on nature. These poets speak of getting back to nature and letting the soul rejuvenate naturally. This opportunity to take students out to a natural setting will allow them to experience, reflect, and ponder what the authors of the poems were trying to express. A teacher could then ask the students to write a short poem of how nature affects them directly or indirectly. The students could become involved in other types of creative writing by visiting the campsite. A teacher can have the students write a reflection paper on what they thought of the surroundings and how it affected their feelings. The learning options are endless and a thoughtful teacher could have many opportunities for enriching young minds.

If you have knowledge, let others light their candle to it.

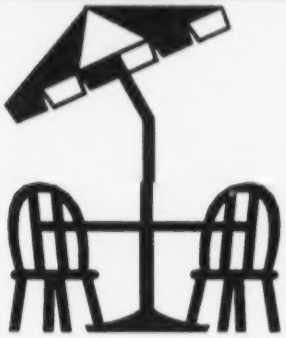
Thomas Fuller

An art teacher studying natural landscapes can have the student draw their impression of nature at O'Connell's. The Neo-Classic artist drew with the help of nature in the background. The Romantic artist drew with nature in the foreground, for example Thomas Cole, "Landscape Scene From the Last of the Mohicans" (1827), or Thomas Moran, "Grand Canyon of the Yellowstone" (1872), or Frederic Edwin Church, "Niagra" (1857). The artist had the element of nature as a major ingredient in the painting. Art students could decide if they wanted to depict nature in the foreground or the background. It would be interesting to see how they interpret this assignment.

A kindergarten teacher could have the students finger paint or sponge paint an impression of the campground. This method enables the students to express themselves in a creative fashion. The kids would have fun with their hands and their minds, while still expanding the young impressionist in them.

Campsites Mean Job Opportunity

Another plus to the Yogi Bear Campground, besides fun and recreation, is the knowledge of how a retail business works.



Campsites continued:

Some of the occupational skills are food service, telephone / *computer skills*, maintenance, and personnel relations. The O'Connell's feel that this component of their campground is a "tremendous learning experience for kids". This element promotes self-esteem and self-discipline for the students who take part in the work program. Mr. O'Connell said, "It is terrific to watch these students blossom into young responsible adults".

Other amenities at the campground for teachers and their students are hiking trails, lake or pool swimming, hay-wagon rides, playgrounds, volleyball, basketball, horseshoes, and a haunted house in October. These opportunities are not only available to school groups, but also to non-school organizations such as 4-Hers, scouts, and church groups.

The owners of the Yogi Bear's Campground want to be accommodating to "you" the classroom teacher. A simple telephone call will get you started, so that your students can take advantage of this amazing area.

Whether you are going for a half-day, full day, or overnight, the O'Connell's will do their best to make your field trip rewarding. Campsites, tents, cabins, and large hall facilities are available for overnight guests. Food service arrangements are available for extended visits. An activity director is on-hand for games, mixers or other camping entertainment. All costs and expenses are determined when making reservations for the field trip. The O'Connell's are very proud of the campground and their facilities! They are excited about having more class visits and using the resources

To him who in the love of Nature holds. she speaks A various language.

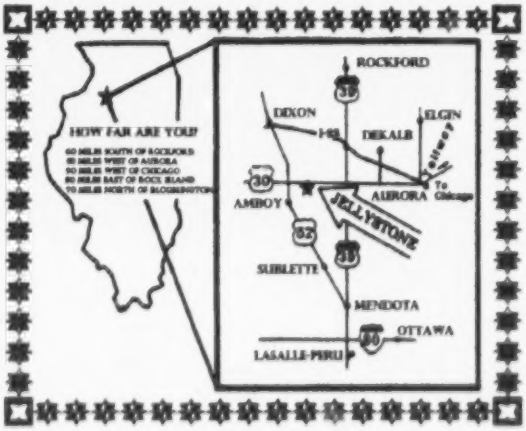
William Cullen

that Yogi Bear's Campground has to offer. Mr. O'Connell would be pleased to come to the classroom and share information about his special educational environment. Why not give him a call and see where outdoor education can take you and your students?

Karen Baylor is an Early Childhood Special Education Teacher for Lee County Special Education, Dixon, Illinois. Her classroom is located in Sublette, Illinois. She has been teaching early childhood for 14 years. Currently she lives in Ashton, Illinois with her husband and two sons.

REFERENCES

Personal interview Dan O'Connell, (1999), owner and operator of *Yogi Bear's Camp Resort*, Amboy, Illinois.



LIKE TIME WAS: PAUL GRAEHLING AND HIS MUSEUM

by Jan Bates

The life work of some people seems to embody the person and Paul Graehling is such a man. He has taken fifty years to create a wonderful work of art, the Graehling Museum located in Polo, Illinois. This unusual place, so aptly named "Like Time Was" by Graehling's daughter Rosy, is easily overlooked, even by people in the community. However, if you are ever privileged to gain admittance, you will never forget it.

Mr. Graehling will be 84 in June of 1999, but you would never guess his age by his physical appearance, nor by his energetic level of activity. He is as apt to be replacing an air conditioner on the roof as he is to be sitting by the fireplace in the log cabin. Perhaps he'll be in the basement shop where he does woodworking. He began seriously collecting artifacts in the late 1950s and continued for ten years. He then remodeled the building that now houses his collection and began to arrange things categorically. Although he claims that he is no longer collecting, his daughter says that he still buys some items which people bring to him.

Mr. Graehling is the type of citizen every community needs. He has been active in Polo, helping to keep the local history available to present and future generations. Recently, he has greatly influenced four important renovations: the Burns House, which currently houses the Blackhawk Waterways Tourism Bureau, the Aplington House, home of the Polo Historical Society, the Campbell Building, a former law office under renovation, and the Old Dry Kiln.

As important as these community activities are, the museum is his personal legacy for his family. Mr. Graehling and his wife Doris worked in the museum almost every day for many years until her recent illness and death. Mr. Graehling continues to work there daily. The Graehling museum is many things: a place full of antiques and collections of all types, a workshop for Mr. Graehling, and a family gathering place. Tables and sitting areas dot the museum for family holiday celebrations. What a marvelous place for grandchildren to explore and experience history! Imagine the memories created when a grandson helps

82

his grandfather create a display that will endure for years.

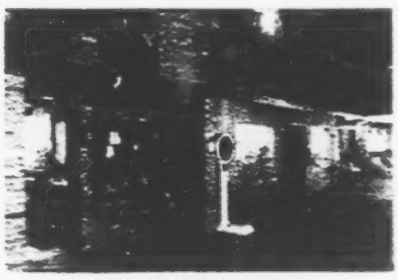
Mr. Graehling claims he has no single trade. However, he loves different woods and is obviously a fine craftsman. He has made many of the display cabinets in the museum and has an industrially-fitted woodworking shop in the basement. He still designs and sells award plaques for people who are being honored. Old woodworking tools are displayed in one of the museum rooms. He has pedal and treadle saws and routers which are fun to look at, but difficult to operate. He also has a large collection of old planers and levels. Any carpenter or cabinetmaker would be able to spend hours here thinking of how the tools were used.

Mr. Graehling using his pedal saw.

In one room there is a log cabin which was originally situated near Brookville, Illinois. As Mr. Graehling dismantled the cabin, he numbered the logs and reassembled the cabin within the museum. Mrs. Graehling used to cook over the fire in the large fireplace. The pots and utensils needed for cooking are still within easy reach around the fireplace. Hidden behind wrought iron doors is a microwave and Mr. Graehling built another cupboard to hide the refrigerator. Hanging from the ceiling are a wasp nest, old Indian corn, and a wooden board used for drying pelts.

In another section of the museum you can find a blacksmith's forge and a harness shop. The blacksmith's tools are located in the same area. In the middle section of the museum is an old country store. There is a bagger area, a paper machine, and an old cash register on the counter top. The old post office window from Haldane, Illinois is also located in the store. In the same room there are collections of cigar boxes and bottles which were typically found in a general store. Nearby is the section which contains a large, old wooden teller's window from a bank in Lena, Illinois.

As one looks around the museum, it becomes obvious that Mr. Graehling is also fond of timepieces. Next to the emporium is a watch repair room where he works on watches and stores related tools. Across the aisle is a room arranged like a store which contains many old timepieces. In another area called the clock room are many unusual clocks, lampshades and shaving mugs. Mr. Graehling has made clocks for each of his three daughters and for each grandchild. He enjoys taking pieces of old watches and putting them together to create a rebuilt watch which works.



Watch and clock rooms

With every step one finds something else to look at--dolls, dishes, flower pots, historically significant pictures, and framed articles on the walls. For example, one interesting picture depicts life in 1776 and 1876 compared side by side. The drawing is a history lesson in itself. Additional pictures include a Centennial scene of Philadelphia in 1876 and a beautiful aerial drawing of Chicago in 1893. Mr. Graehling also has photos of downtown Polo taken in 1870 and 1880 which show horses and carriages in the streets and a boardwalk for pedestrians. Other items of interest are one of the first reclining chairs, a beautiful working old organ, samples of early washing machines, looms, a pram, a dough box, a linotype machine, and a hand printing press.

One recently completed item is a framed history of the museum building.

Mr. Graehling has accumulated articles and pictures which show the evolution of the old buggy factory into the museum building it is today. Hanging from the ceiling in the main hallway is the body of one of the buggies manufactured in the original plant. Across the street from the museum the home of the family which operated the buggy factory still stands, and Mr. Graehling has pictures of that house as it appeared when the factory was operational.

If you are fortunate, Mr. Graehling may share with you one of the many stories about the items which he has collected. For example, as I noticed a painting of a young George Washington, Mr. Graehling said that it was painted by a man from Polo named Henry Spickler who "used to run the dump." Spickler's real claim to fame, however, was that he started a trip around the world with 10 cents in his pocket and later wrote a book about how he completed the journey.

This is just a glimpse of an intriguing man and an historically rich fascinating site. Many people will be interested in visiting this fine community resource, and I'm sure they will enjoy the experience.

Ideas for teachers:

Different age groups and classes would benefit from a visit to the museum. American history classes would find a wide variety of artifacts to study. In addition, vocational classes dealing with woodworking or machinery would find much to view here. Home economics and family living classes could look at furniture, dishes, pots and pans, and many other fascinating displays. Possibilities seem unlimited for any kind of class that could learn from a trip into the past.

The Graehling Museum is a private collection. Although the family welcomes visiting individuals and groups, they prefer that children be in fourth or fifth grade or above before visiting the museum.

Author's Note: Special thanks to Mr. Graehling and his daughters for generously spending time with the author and for providing interesting insights into the collection.

Jan Bates received her bachelor's degree from SIU Carbondale and her master's degree from NIU in education. She is currently a Spanish teacher at Polo Community High School.

Learning From the Past with Writers of the Future

Susan Tyrrell

What a community is today is a direct result of its history. A ten or eleven year old child usually has a difficult time understanding how a community evolved. At this age the present is all the child focuses on. The children learn best by doing, as do most of us. Developmentally, the child may not be able to understand this concept of developing communities without experiencing it. To meet the objective for social studies in fifth grade American History, I began to search our community for resources that would help my students understand its history. If they understood the history of Mt. Morris, they might better understand how history has affected the entire state and country.

I was new to the community and felt inept as a resource person. Two blocks from the school is Pinecrest Retirement Community. There are three levels at the retirement community. The first consists of duplexes where residents live totally independently. The second consists of apartments in which residents receive limited assistance. The third is a nursing home. After much discussion with the activity director at the home, we decided on a yearlong project. Each student would be paired up with a resident of the nursing home. The students would visit their resident monthly. During the visit, the student would either conduct interviews, or participate in activities such as bingo, with the resident.

Adeline Hay holds on to the witch's hat of fifth grader from Sue Tyrrell's class

If there was an activity during our experience, pictures were taken and the student created captions for the pictures. At the end of the school year students compiled two identical books, bound and illustrated by the student.

BEST COPY AVAILABLE

Once the plan was in place, the implementation began in the fall of 1994. The students needed to learn about the elderly so they would have some background knowledge about them before going to Pinecrest. I did this by using the students' own families as models. The students were asked to complete a family tree that traced their heritage. When the sudents returned the work, I noticed the students had gone back only as far as grandparents, unlike my expectations. Students were encouraged to trace back to their great great grandparents. The class developed questions to ask the grandparents, to complete the missing information. There was a discussion on what the positives and negatives are of being a senior citizen. Two students invited their grandparents to come in and talk to the class about how their life had changed since their youth. The grandparents talked about an increase in illness, loss of mobility, memory loss, and the increased number of deaths in the age group. Interviewing the grandparents gave students the opportunity to practice interviewing techniques.

THE INTERVIEW. Learning first hand from Pinecrest resident, Lawson Snyder, about what the 1-room schoolhouse was really like.

The students were now ready to begin preparation for the first meeting, an interview. As a class, questions were developed based on the topic, "school days". The students asked questions about what school was like for the residents. They asked questions about hours per day in school, subjects taught, length of school year, classrooms, and transportation. Most of my students wrote the responses, but a tape recorder would work better. Subsequent interviews included the topics: "Who are you and where did you come from?", "Holiday celebrations", and "How the community has changed and why". After the visit, students wrote up the results of the interviews for the biography.

Every other month, the students engaged in an activity with the residents, usually in a party. Before this visit the students planned activities in which the residents could participate. One favorite was the holiday bingo using pictures rather than words. The students made the cards on 8x11 paper, so residents could see the pictures. Some activities were crafts that related to the holiday. Food and drinks were also a part of the visit. This allowed time for the residents and the students to visit together.

Because we were dealing with the older people on a yearlong basis, two of my students did experience the death of their resident. The first student had never experienced the death of someone he knew, so we had the social worker at Pinecrest meet with him when it first occurred. This student was not interested in getting another resident, so he became the "organizer" for the project. He led the class in determining questions for the interviews and served as an activity leader. He also was the class photographer. This allowed him to participate in a way that was comfortable for him. The second student was sad, but chose to get another resident assignment. Her new resident wanted the biography to include the first resident since she had known her. The ability to adjust to unforeseen happenings increased the success of this project.

After the April visit, the students compiled the biographies. The book's contents were put in chronological order

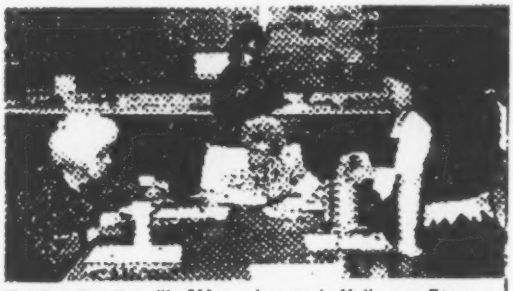
according to the visits. At the beginning of the book was an author's page, which included a picture of the student and a narrative about the experience. The students then bound the two books. In May, a picnic was held where the books were presented to each resident. The students signed the residents' books and the residents signed the students' books. After eating, the students read their books to the resident. The final snapshot was taken that day and put in the book on the last page.

This experience changed all those involved in a positive way. The students learned the history of Mt. Morris from the very people who made that history. A friendship was created across generations, and the residents, many of whom saw little purpose for life, found one.

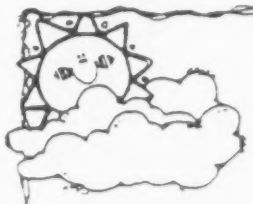
What does Intergenerational Mean? It means finding ways to connect the residents of a nursing home with students of a grade school. As a result of the fifth grade project, a committee was formed by Pinecrest to generate more ideas bringing students together with residents. In late October the first meeting was held. The Intergenerational Committee members were Richard Bright, Pinecrest Chaplain; Sue Tyrrell, Rahn Elementary; Mary Greenawalt, a children's librarian and a Pinecrest Village resident; and Bev Linzemann, Pinecrest Activities Director.

Ideas generated from the first meeting included bringing students together with residents who are former teachers in an after school reading-help program, and an assisted-learning program during school. The after school reading program between resident and student has been used at Pinecrest in the past, with success. Other ideas discussed were craft exchanges and music programs between students and residents. Show-N-Tell sessions would have residents going to school with their interesting keepsakes or hobbies to show students.

The school continues to work with the Pinecrest Community to use the resources there to help with the education of the students of Rahn Elementary School.



Teacher, Sue Tyrrell's fifth graders made Halloween Bingo cards for residents to play -- enjoyed by Martha Long (left) and Ada Haines in this picture.



Susan Tyrrell currently teaches second grade in Mount Morris, IL. She has taught in Mount Morris for five years but spent eleven years teaching in Aurora, IL. Her teaching experience included K-6 grade school age children.

BEST COPY AVAILABLE

Amboy Depot Museum
Serving Iron Trains to Children's Brains

by Tom Full

As the giant iron horse steamed and groaned its way to a halt at the Amboy Depot, the crowd pressed forward to see if *he* was actually aboard. Men stretched curious necks, ladies leaned forward with no loss of dignity, and small children navigated the maze between taller people's legs to secure a better view of *that* man. The train coughed, spewed its last gasp of steam, and ground to a standstill. As the ticket taker settled the portable steps which aided in embarking, the towering figure emerged from the rear of the car. At first, the crowd whispered and then cheered. Abraham Lincoln stepped down the wooden stairs to become a part of Amboy's history.

During the 1850s, the Illinois Central Railroad decided to expand its operations westward after securing land grants and making small land purchases. The name of this new depot was first proposed to be Kepatan, but officials decided on the name of Amboy. Three theories exist about how the town of Amboy received its name. First, a white man asked an Indian lad to which tribe to he belonged. The young Indian looked up and replied in broken English, "Am boy." The second theory comes from an Indian word meaning "between the hills." Lastly, some think that many of the settlers were from Perth Amboy, New Jersey, and they shortened the name to simply Amboy.

To build the depot, a plot of ground was laid out and about four million bricks were used in this building's construction. The first building was called "The Passenger House" and used as a hotel. It contained 50 beds and numerous cots for passengers and switching crews. On December 15, 1875, the hotel was destroyed by a fire.

Work began in the spring of 1876 to construct a depot for the division headquarters of the Illinois Central Railroad. The site selected was where the razed hotel had stood. The work was completed in January, 1877 at the cost of $15,500. The new depot was made

completely of brick. It was 32 feet wide, 88 feet long, and 35 feet high with two stories and an attic. The first floor had ten rooms with separate waiting rooms for male and female passengers. It also contained offices for train men, baggage men, ticket agents, and conductors. Also housed were a fireproof vault and a room for batteries which provided power for the telegraph. The second floor had rooms for the superintendent, engineer, train master, and another steel vault. A spectacular, curved, seven foot-wide stairway provided access between the floors. Sixteen coal stoves, eight on each floor, furnished heat in the winter. There were eight chimneys serving sixteen stoves. The stove on the second floor was directly above the stove on the first floor so a common chimney could serve both stoves.

Eight sets of tracks were laid out west of the depot. There were repair shops and a round house which was used to turn huge locomotives around.

In January 1894, the headquarters was removed, and Amboy's railroad started to decline and fall into disrepair. By the late 1920s, most of the jobs disappeared. In 1939, the last passenger train had left, and by 1967, all activity stopped with the station's final closing.

In 1968, renovations started on the building to create a museum. In 1997, a Galena restoration firm was hired to rebrick and tuck point certain bricks of the building. The 50 windows were taken out, shipped to Galena, and restored to the original paint and condition. The cost was approximately $325,000, of which 80% was funded by federal grants. A steam-powered locomotive now rests on the west side of the museum, courtesy of Northwestern Steel and Wire.

If you want to visit, Ron Hargitt is the contact man, and the museum is open Saturdays and Sundays from May to October. Many educational opportunities are available to teachers and parents wanting to use the depot's historical resources. Mr. Hargitt's knowledge of the steam locomotive is unparalleled. His description and explanation of each part of the train is astounding. The function of each room in the depot is explained by the guide.

As a math project, the students could be assigned to groups and given a room to explore mathematically. First, the group could estimate the square footage of the room, as well as the volume. Then armed with a measuring stick, the students could calculate the actual results. The students could return to class with these dimensions and be responsible for scaling their room down to model size. They could then build a model of their room with cardboard, wood,

and other necessary materials. The rooms could be glued together to form a replica of the Amboy Depot. The replica could then be painted to look like brick and windows could be drawn or cut in. If time permits, the students could be responsible for the interior design also. They could perform a miniature restoration of the furniture and wall decorations of a particular room for that era of time.

Science classes could discover the vast collection of valuable rocks and minerals secured from the estate of deceased Amboy rock hound Professor Art Blocher. People from all over the world have come to visit his rock garden at his home on the west end of Division Street in Amboy. The rocks and minerals saved after his death will be cataloged and displayed in antique showcases in one room of the museum. Prior to visiting the museum, students will be given a blank Bingo card. In each square, the students will put the name of a rock or mineral they may see at the museum. During the visit, the class could list the names of the rocks and minerals in the display cases. After returning to school, they could trade Bingo cards and cross out each rock or mineral found both in the museum and listed on the card. Anyone scoring a "Bingo" would receive a prize. If no "Bingos" were achieved, the highest number of squares crossed out would receive the prize.

In Social Studies, a historical scavenger hunt could be set up. Students could find historical information about each room with questions prepared by the teacher. The students would be paired and given a sheet of questions as they enter the museum.

As you can see, the Amboy Depot Museum is a building yearning to be discovered by educators, parents, students, and anyone interested in historical buildings. As Euripides stated, "He who neglects learning in his youth, loses the past and is dead for the future."

Tom Full was born in Amboy, Illinois in 1946. He has taught Language Arts and Reading at Amboy Junior High School since 1976. He currently resides in Galt, Illinois and enjoys riding motorcycles and golfing.

FATAL EQUATIONS

A Trip to the County Morgue

By: Ric Cupp

"That day should have been her prom or graduation day, not her funeral day." This is the message given by Kathy Miller discussing her daughter Monica Zeller's death in a car crash. Fifteen year old Monica was a passenger and one of three teenagers killed in an accident which was not alcohol or drug-related, but was caused by someone's carelessness and showing off. Driver education students receive this message, among others, when attending a presentation by Darrell G. Cash, Ogle County Coroner. Mr. Cash has offered programs to young, inexperienced drivers for the last five years. As far as he knows, Mr. Cash is the first and perhaps the only coroner in the state, and possibly the country, who offers this type of program to schools. Cash's program attempts to open the eyes of beginning drivers-not through lecturing, threatening, or scare tactics, but rather by being realistic and making the students think about the results of their actions.

The coroner's program starts with a trip to the county morgue, not a pleasant experience for most. However, most students prefer to visit under the present circumstances rather than as permanent, lifeless visitors. Coroner Cash presents ideas to young drivers stressing the responsibilities of keeping themselves, their passengers, pedestrians and other drivers safe. Cash states that by always remembering his idea of "Fatal Equations", as outlined below, a person becomes a safe and more courteous driver.

Fatal Equations aren't math problems, but a matter of life, death or suffering. As Cash discusses the Fatal Equations, he shows photographs and documentation of actual cases his office has dealt with over the last year. In each case, he relates one of his formulas to how it pertains to the specific case. The cause of the accident, number of deaths, and any charges against the drivers are related as well. The objective is to get the students to do some deep reflecting on their personal driving experiences and habits, as well as those of their close friends.

SIX EXAMPLES OF CORONER CASH'S FATAL EQUATIONS

1. N/B + V + A = T	No seat belts plus vehicle plus accident equals tragedy.
2. S + A + DR = T	Speed plus alcohol plus drugs equals tragedy.
3. R + S + V + T	Recklessness plus speed plus vehicle equals tragedy.
4. I + C + S = T	Inexperience plus carelessness plus speed equals tragedy.
5. T + DE + V = R/H	Tragedy plus death plus vehicle equals Reckless Homicide
6. R/H + CO = P	Reckless Homicide plus conviction equals prison.

Deadly car crashes are not always alcohol and drug related; inexperience and carelessness may also play a role. Cash uses other outside resources to get his message across. He invites Ogle County State's Attorney Doug Floski to share information relating his knowledge and experiences as well as sharing or explaining some legal definitions. Floski shows how driving in a reckless fashion has "the same killing potential as a bullet fired from a gun". The State's Attorney points out that if you drive in a reckless manner and cause an accident in which someone dies, you are guilty of reckless homicide. A prison sentence is the ultimate result of reckless homicide where the courts are concerned. Morally, the driver must deal with the issue of taking the life of a person, friend, or loved one.

Possibly the person who has the strongest impact on the students is Kathy Miller, the mother of the victim who lost her life in a careless driving accident. Mrs. Miller shares her terrible ordeal by recalling a series of events including receiving the notification that her child was involved in a gruesome accident, going to the accident scene, and finally to getting the report from a police officer that her daughter had died. Mrs. Miller explains how she felt. She describes her feelings of disbelief, denial, and hatred toward the others involved. The presentation is fittingly set in the morgue, a ghastly, quiet and emotional location. Students may be uneasy about the surroundings, but it's good for them to see the full impact of careless action, and important lifesaving information is learned.

To close the 55-minute program, Mr. Cash gives a tour of the facilities, which includes the "cooler" where bodies are stored while waiting for autopsies. This usually has a "chilling" effect on the students. As you enter the room the temperature drops about 20 degrees and a cold and impersonal atmosphere grips the students. After leaving the cooler, the students are shown the autopsy room where tools, such as scalpels and a toxicology kit, are displayed.

Throughout all facets of the presentation, students are encouraged to ask questions. Cash, Floski and Miller agree that students, teachers, and all drivers have to face their responsibilities when driving a car. Many youth seem to be fearless today. Hopefully, through Coroner Cash's program, young drivers will think about the consequences of their actions. If this presentation can save one life or prevent one fatal accident by learning the Fatal Equations, then Coroner Cash feels satisfied. He will continue to make his services available to classes through presentations and hopefully not have to perform his official duties as County Coroner.

The curriculum areas that could be supported by a Coroner's presentation could be driver education and health education. Driver education benefits from this program the most as it deals with the causes and results from serious or fatal automobile collisions. Health education is often concerned with how a person handles the death of a loved one, a serious or disabling injury, and thee natural grieving process that follows.

This program could be an excellent learning experience not only for the two areas noted above but other numerous fields of study.

Ric Cupp is the AFC Raiders Athletic Director. He teaches physical education and driver education in Ashton, Il.

92

The Bread & Butter of the Rock River Valley; Northwestern Steel & Wire

By:
Peter Goff

Nestled along the banks of the Rock River in the Sterling-Rock Falls area is the home of Northwestern Steel and Wire. This company was established in 1879 and is a major mini-mill, producer of structural steel, and rod and wire products. I believe that NWS provides teachers with three great teaching tools across the curriculum dealing with the history of the mill, the business aspect of an industry, and the vocational side of the mill.

First, the history of Northwestern Steel and Wire in the Sterling – Rock Falls community. The NWS is a major mill producer of structural steel and rod and wire products. The mill is different from other integrated mills in they use coke and iron ore and blast furnaces. In mini mills, they use electric furnaces that melt steel scrap and cast long strands of steel to various shapes. They produce wide flange beams, along with wire products. The most important point is that the NWS brings the area jobs! There are many generations that have toiled for this company and many that are still in the work force.

Another theme of NWS that is vital to our teaching is the business side of the mill. There are many different professional jobs that are utilized at NWS. The CEO of the company deals with business, accounting, sales, and engineering aspects.

The business part of Northwestern Steel and Wire would have business classes in accounting. Northwestern Steel and Wire has incredible work forces that need to be paid. Also, the income from the mill products sold and the out going payments for the materials that are needed to make their products are other examples of the business part of NSW.

Another dimension of the business of NWS is the sales department. The content area for this part of schooling would be in the consumer education or business education classroom. Teachers could show students the marketing and how the stock market works in this part of the business. One of the possible assignments is to watch how NWS performs on the New York Stock Exchange. This part of NWS could open the eyes to the future business "tycoons" in your classroom.

The third, and last theme of NWS resources that could be used in your classroom would be the vocation aspect. In this job phase, there are many different departments inside the mill that students could select to train in. Northwestern has the furnace department, which utilizes the six largest electric furnaces in the world. The schools science/chemistry department would benefit from this theme by discussing the carbon electricity that is lowered into the furnace and charges the

steel. Chemistry teachers would want their students to encounter such an event. This process can be seen step by step on the NWS web page. The next department would be the Caster department. After the scrap is melted down, it is poured into a ladle that is moved down to another department where it is poured into the casters that shape the steel and is loaded onto rail cars that takes it to the next phase. This would be part of the engineering aspect of the curriculum. They need people to make this process work smoothly on how to get the steel from one place to another.

Northwestern Steel and Wire is a little town within a larger city. They have their specialists like any city (ie: plumbers, T.V. repair persons and electricians). At NWS they have their own repair people whose duties fall into the vocational realm of schooling. They have positions titled millwright, electrictian, and pipefitters. The millwrights are the "jack of all trades" on a mill. They are assigned to a specific mill (i.e. 14", 12", caster, and furnace). They have to know their particular mill thoroughly. When something goes wrong with the mill, they call these specialists to fix the specific problem. They have to know how to weld and be overall handymen. The next vocational training topic is an electrician. These specialized jobs deal with all electrical work needed in the mill. They have the six largest electric furnaces in the world so they have to be experts on electrical knowledge if something goes wrong.

In conclusion, Northwestern Steel and Wire is a very versatile company with much to offer the school curriculum. In the Rock River Valley, they own a big part of our community history. They also employ a significant number of people in accounting, sales, and engineering. The vocational schooling is probably the dominant work force within the mill. We need skilled people to keep the large industry thriving. Northwestern Steel and Wire can open unlimited avenues in your teaching. For more details, surf the web at NSW.com to bring your classroom to life.

About the author: Peter Goff is a teacher at Ashton High School. He teaches jr. high language arts, high school speech, government and geography. Peter also has experienced Northwestern Steel and Wire as a labor worker in his college years. He also lives in Sterling with his wife Molly and three daughters: Emma, Sophie, and Chloe.

Turn Your Gym Into A Skating Rink

By: Jan White

If you are looking for a new way to add variety to your physical education curriculum, bring the excitement and fun of a roller rink right into your gymnasium. The skates have soft urethane wheels much like tennis shoe soles; students can skate right on the gym floor. Skatetime is a business in Morrison, Illinois that will deliver roller and/or inline skates directly to your school.

Skating is a "life time sport" which enhances balance, coordination, and motor skills. It is also a very good cardiovascular workout that fits extremely well in a fitness unit. Skating provides a co-ed sport where boys and girls of all ages are on equal ground and quickly develop skills that will enhance their ability to excel in other sports. Most importantly skating is fun and students will want to participate.

How did skating become available in school settings? According to the handout by Skatetime in 1985, Skatetime began as a vehicle for extra income to roller rinks. A rink owner began by delivering equipment to local area schools. The faculty and staff of these schools enjoyed the convenience this offered. As faculty moved or migrated out of the area they convinced the operator to continue to service their schools. This was the beginning of Skatetime School Programs.

Currently Skatetime is active in over 2000 schools and 15 states. In 1998 Skatetime added inline skates for grades 5-12 that can be used safely on the gym floor. Roller skates come in sizes Youth 8 to Adult 16. Size Youth 8 to 2 have velcro instead of laces allowing for more instructional time in thirty-minute class periods. Skates can be rented for five or ten day programs at a low cost to the students. An instructor is available for the first day of the first year in which the program is purchased, free of charge. If an instructor is needed after this time a slight charge is added to the skate rental.

Skatetime also provides a packet with an instructional video, which shows skatetime school programs, set up, and an overview on the actual instruction. A teaching manual is supplemental to the video by providing skate games and ideas, lesson plans and a sample shoe chart.

An important part of any activity is safety. The Consumers Products . . . Commission reported skating to be twice as safe as a playground, three times safer than football or baseball, four times safer than basketball and five times safer than bicycling.

Did I spark your interest? The emphasis on skating as a "lifetime sport" has made the Skatetime program a sign of the times. Skatetime has been skating with K-12 students all across the Midwest for more than a decade. They offer all schools a quality program as well as a network of support that will make

skating in physical education class as easy as 1-2-3. Invite Skatetime into your school and enjoy what other instructors strive for full participation.

Sample Lesson Plan

(Elementary Level)

LESSON OBJECTIVES:

By the end of this lesson the students will be able to:

1. Follow classroom procedure in handling skate equipment.
2. Follow safety rules and instruction.
3. Stand in place on skates.
4. Skate in forward direction.
5. Stop motion by using the correct stopping techniques.
6. Change directions while skating forward.

LESSON ONE:

I. Class rules
   - A. Process
     1. Street shoes come off before you are allowed to get skates from cabinet.
     2. After selecting skate sizes, street shoes are put in skating cabinet in place of skates.
     3. Students are to return to the end lines of the gym floor, and spread evenly apart to put on skates.
     4. Skates are put on and laced all the way up.
   - B. Safety
     1. If you feel you are losing your balance, you are **NOT** to grab the person next to you. Instead you keep your arms up and sit down with the momentum and slide until your body comes to a stop.
     2. Students are not to speed skate, create trains (holding on to the waist of other students in a line), use walls for stopping, or stand in corners or doorways.

II. Basic Skills
   - A. How to stand up on skates.
     1. Rise up on both knees.
     2. Put one skate on the floor.
     3. Hands on that knee and push with both hands on that knee and slowly stand.
     4. When students are completely standing, back wheels are touching one another by squeezing heels together.
   - B. Forward skating
     1. Skate cues:
        a. Turn skates slightly outward and march in place.
        b. Alternate weight on both feet.
        c. Knees bent, eyes up, and back straight.
     2. Activity
        a. Have students march the length of the gym.
     3. Assessment
        a. Skate cue checklist.

C. Stopping
   1. T-stop cues:
      a. Majority of body weight is on one foot.
      b. Back skate is turned perpendicular to the other foot.
      c. Lightly drag back foot to halt forward momentum.
   2. Activity
      a. Students will skate in a circular pattern around the gym and t-stop when the the music stops.(repeat)
   3. Assessment
      a. T-stop cue checklist.

III. End of class instructions
   A. Process
      1. Students will be instructed to forward skate over near Skatetime cabinets.
      2. Instructed to sit down the opposite way they were instructed to get up (by placing one knee to floor, then the second knee, then sitting down slowly and under control).
      3. Students are to remove skates, and tuck the laces inside the skates and put the skates away in the cabinet after they remove their street shoes from the skating cabinet.

PROGRAM INCENTIVE IDEAS

1. Schedule a night in the gym for students and faculty to skate with their families.
2. Skates could be available on the weekend for open skating for fundraisers.

Jan White is a Physical Education teacher for grades K-12 in Ashton, IL.

BE A SHINING STAR

By:

Lou Ann Schuldt

Have you ever wanted to be something or someone you're not? Imagine yourself a beautiful fairy princess, an evil sorcerer, a talking horse, a hero to the rescue, or a tree being picked of fruit. The possibilities of portraying characters or things are endless when it comes to storytelling, creative dramatics, or playacting. What a great opportunity to exercise your brain and stretch the imagination. How else could you travel to another place or exist in another time? You could solve moral problems. How about letting go of your worries and be silly. Be what you're not or be what you are.

If good old play of the imagination is the avenue you would like to take with your students or show how to make a story come alive, let me suggest an audience with Mrs. Marjorie Kontos. Mrs. Kontos is a storyteller, a teacher and user of creative dramatics, and a playactor. When asked what kind of stories she likes to do, Mrs. Kontos' response was varied.

For children's stories she prefers stories with lots of action and excitement. A sampling of stories she performs are "Charlotte's Webb", Trumpet of the Swans", "Caddie Woodlawn", "Mr. Popper's Penguins", "The Velveteen Rabbit", and "There Are No Bears On Hemlock Mountain". Use of "limited" props and "simple" costuming are an integral part of the program.

Adult stories might include those with an inspirational message, humorous stories, or true stories; depending on the audience. Some examples of the adult stories she performs are "Having Our Say – the Story of the Delaney Sisters", "In the Vineyard of the Lord", "The Orphan Train", and "Papa's Wife". Once again, "limited" props and "simple" costuming are part of the performance.

Marjorie also performs her own authentic material such as "Gwendolyn the Witch" and "Pocket Lady Goes to the Circus".

How did Mrs. Kontos become involved with all this creative power? Her interest and involvement began as a child. She loved pretending, acting stories out and going to the movies. As she got older, high school activities included choir, band, and school plays. After-school hours and summers found her singing in local performing groups and attending summer workshops for both playacting and radio shows. The increasing love for her art led her to Northwestern University where she obtained a degree in creative dramatics, speech, and theatre.

What is creative dramatics and how could it apply for me, my classroom, and the Illinois Standards? Creative dramatics is a wonderful, interesting way to make stories come to life for you and your students, as

well as teach many skills required by the State of Illinois. The following list cites only a few of the skills offered through creative dramatics:

1) Development of imagination
2) Learning sequences
3) Development of characterization
4) Use of voice and body
5) Understanding of people
6) Learning to work with others
7) Introduction to variety of literature
8) Honing thinking skills
9) Moving to music
10) Pantomime

Creative dramatics could satisfy Illinois Standards in many subject areas and in all grade levels.

Marjorie's present and past experiences, education, and talent make her the perfect choice to aid an educational experience for your students. Her resume' highlights include:

1) Graduate of Northwestern University
2) Aired a TV program for children titled "Story Time"
3) Authored a book for children titled "Let's Play"
4) A member of the American Association for University Women
5) Directed community children's plays
6) Accomplished musician on recorder, flute, piano, and voice
7) Summer stock theatre participant
8) Taught Academy of Performing Arts
9) Directed summer workshops in creative dramatics
10) Taught creative dramatics through the YWCA
11) Actively gives book reviews and acts as a storyteller

Approximately 30 years ago I got my first lesson in creative dramatics. It was Mrs. Marjorie Kontos who gave that lesson to me. I can still see her telling the story and how I felt I was part of the story. She caught me under her spell! Maybe, after having invited Mrs. Kontos to share her talents, you might find a "shining star" within yourself or among your students.

Lou Ann Schuldt is an elementary music teacher, grades K-4, for the Dixon School District

NOTES

BEST COPY AVAILABLE